DOCUMENT RESUME

ED 198 872 JC 810 154

AUTHOR	Fitzgerald, Richard F.
TITLE	An Evaluation of a Faculty Planned Instructional Development Program at Florida Keys Community College.
PUB DATE	80
NOTE	139p.: Ed. D. Dissertation, Nova University.
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	College Faculty: Community Colleges: Evaluation Methods: *Faculty Development: *Inservice Teacher Education: *Instructional Improvement: Literature Reviews: Needs Assessment: Pretests Posttests: *Program Evaluation: School Holding Power: School Surveys: Teacher Evaluation: *Teacher Workshops: Two Year Colleges
IDENTIFIERS	Florida Keys Community College FL

ABSTRACT

This five-part report describes and evaluates an in-service instructional development course, which was conducted between December 1978 and February 1979 in a series of five modules for faculty at Florida Keys Community College (FKCC). Chapter I presents introductory material discussing the need for such a course, identifying the criteria upon which the course was evaluated, and defining terms. After Chapter II reviews related literature, Chapter III presents: (1) a step-by-step description of course-planning activities, in which course objectives were determined by faculty responses to the Herrscher Instructional Effectiveness Inventory and the Raines Professional Developmental Needs Survey: (2) a brief description of the course modules, which focused on cognitive mapping, utilization of pre- and post-tests, the construction of competency-based objectives, methods of practical research, and the faculty-student-counselor relationship: and (3) a description of the methods used to evaluate the course, which included pre- and post-tests measuring participant learning and satisfaction, and a comparison of student attrition rates before and after the instructors' participation in the course. Chapter IV details findings for each component of the evaluation, and Chapter V presents summary conclusions. Pre- and post-tests are appended. (JP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED198872

AN EVALUATION OF A FACULTY PLANNED INSTRUCTIONAL DEVELOPMENT PROGRAM AT FLORIDA KEYS COMMUNITY COLLEGE

Richard F. Fitzgerald

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.
☑ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Richard Fitzgerald

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

JC 810 154

A MAJOR APPLIED RESEARCH PROJECT PRESENTED
TO NOVA UNIVERSITY IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY

1980

FOR ELLAN

ACKNOWLEDGEMENTS

The author expresses his sincere gratitude to George M. Barton, George Mehallis, and Eugene E. DuBois for their guidance, direction, and encouragement in the completion of this study. The opportunities for learning and for personal growth offered by Mantha Mehallis, Dale Tillery, Oscar Mink, Barton R. Herrscher, Ross E. Moreton, and Max Raines, National Lecturers in the Nova University Program, are also deeply appreciated.

A great deal is owed Hal Massey, Dean of Instruction at Florida Keys Community College, for his encouragement from the beginning of the author's studies. His help, as counselor and friend, has been invaluable. The support of Ann Otto and Geri Caron, friends and colleagues, has been constant and is greatly appreciated by their fellow student. Indeed, President William Seeker and all members of the campus family at Florida Keys Community College have been willing to help the author at every turn. The kindnesses of former President John S. Smith and Interim President Richard Morley are remembered with gratitude.

The author wishes to express his appreciation for the inspiration provided him by his mother, Genevieve M. Fitzgerald, and his aunt, Isabelle Smith, who have dedicated their entire lives with love to the instruction of the young. Although the author's father, Thomas X. Fitzgerald, is deceased, his example of placing people before things is never forgotten. This work is also dedicated to his memory.

A special word of thanks is due Wanda Beard for her caring patience and perseverance in the preparation of this manuscript.

Abstract of a Major Applied Research Project Presented
to Nova University in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

AN EVALUATION OF A FACULTY PLANNED INSTRUCTIONAL DEVELOPMENT PROGRAM AT FLORIDA KEYS COMMUNITY COLLEGE

by

Richard F. Fitzgerald

February, 1980

The faculty and administration of Florida Keys Community College became concerned about the student retention rate in 1978. A task force comprised of students, faculty, staff, and administration addressed the issue and identified quality of instruction as one of the problems related to student retention. An instructional development course for community college faculty was consequently planned, implemented, and evaluated by members of the faculty under the direction of the Dean of Instruction. The three-fold purpose of this study was: to document the development of a satisfactory instructional development course; to describe its impact upon the instructional effectiveness of the faculty; and to report its impact upon the retention rate of students.

In the fall of 1978, all (31) full-time faculty members identified 34 of the 60 items of the Herrscher Instructional Effectiveness Inventory as instructional effectiveness needs. They also identified 15 of the 22 items of the Raines Professional Development Needs Survey as professional needs.

Faculty committees arranged the specified needs in five modules that treated educational processes, pre- and post-assessments, competency-based objectives, practical research methods, and faculty/counselor/student relationships. The Dean of Instruction and a Course Planning Committee developed and distributed copies of the syllabus/course outline and supervised its implementation. Faculty members responded to a pre-assessment prior to enrolling in the course which was offered for credit by the College.

On completion of the course in the spring of 1979, participants responded to a 14 item evaluation survey and expressed satisfaction with the course content, the instructors, and their own involvement. Faculty members responded to a post-assessment that was the same as the pre-assessment taken prior to enrolling in the course. A comparison of summated mean ratings demonstrated that participants perceived an increase in their ability to write knowledgably about topics treated in the modules. When the Herrscher Instructional Effectiveness Inventory was taken by faculty members as a post-assessment, ratings demonstrated increased instructional effectiveness in the areas of instructional design, accommodating individual differences, and educational competencies and goals. At the end of the spring term, data from the Registrar's office indicated that the rate of students successfully completing courses had risen by two percent. In a subsequent term, the rate rose an additional two percent.

It was concluded that the faculty planned instructional development course was satisfactory and that it had a favorable impact upon the instructional effectiveness of the faculty and upon the retention rate of the students.

The recommendation was made that an instructional development course based upon specified faculty needs be renewed annually at Florida Keys Community College. It was recommended that instructional development course evaluations be measured numerically by a comparison of pre- and post-assessments and by reference to student output data. It was suggested that the reporting of the implementation and evaluation of courses at community colleges could contribute to the practical development of a prescriptive theory of instruction.

TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS.................................... i

ABSTRACT.. iii

LIST OF TABLES...................................... viii

CHAPTER

1. INTRODUCTION.. 1
   - Background and Significance................ 5
   - Research Questions......................... 6
   - Definition of Terms........................ 7
   - Assumptions and Limitations................ 9
2. RELATED LITERATURE.................................. 11
   - Development Programs in the 1970's......... 11
   - Selected Practices Used to Improve Instruction.................................. 22
   - Relationship between Instruction and Attrition.................................. 25
   - Recent Changes in Techniques of Instruction.................................. 26
3. PROCEDURES AND METHODOLOGY.......................... 32
   - Planning the Instructional Development Course....................................... 32
   - Implementing the Course.................... 36
   - Measuring the Results...................... 37
4. PRESENTATION OF RESULTS............................. 40
   - Participant Ratings of Satisfaction........ 40
   - Participant Perceptions of Achievement..... 43
   - Participant Ratings of Instructional Effectiveness................................. 50

Page

Student Semester Hours by Term............ 53

5. INTERPRETATION, CONCLUSIONS AND RECOMMENDATIONS.............................. 54

Interpretation of Results................. 54

Conclusions............................... 56

Recommendations........................... 59

Strategies of Diffusion, Implementation and Change................................ 61

BIBLIOGRAPHY.................................... 64

APPENDICES

A. Task Force Report, Problem III.............. 70

B. Herrscher Instructional Effectiveness Inventory.................................. 76

C. Raines Professional Development Needs Survey..................................... 88

D. Syllabus/Course Outline..................... 91

E. Pre-Assessment Survey....................... 100

F. Course Implementation....................... 103

LIST OF TABLES

TABLE		Page
I.	Participant Ratings of Satisfaction with the Content of the Instructional Development Course	41
II.	Participant Ratings of Satisfaction with the Instructors of the Instructional Development Course	42
III.	Participant Ratings of Satisfaction with their Own Involvement in the Instructional Development Course	43
IV.	Achievement Ratings: Educational Systems Approach Module	45
V.	Achievement Ratings: Pre- and Post-Assessments Module	46
VI.	Achievement Ratings: Competency Based Objectives Module	47
VII.	Achievement Ratings: Research and Application Module	49
VIII.	Achievement Ratings: Faculty/Counselor/Student Relationship Module	50
IX.	Differences between Summated Post-Assessment and Pre-Assessment Ratings of the Herrscher Instructional Effectiveness Inventory	52
X.	Summary of Enrollment Data at Florida Keys Community College by Term 1978-79	53

CHAPTER I

INTRODUCTION

Nothing is more important in the community colleges of the nation than the involvement of students in learning experiences that capture their interest and fill their needs. Instruction is the basic means to the attainment of this end.

The upgrading of instruction in community colleges has been a serious concern throughout the past decade. Community colleges have presented themselves as innovators in higher education but the facts have not always lived up to the claims. Research reported by Hammons and Wallace (1976) cited high attrition rates, inadequately evaluated developmental programs, deficiencies in non-traditional learning, and many other problems in the community colleges.

Many observers, including Knowles (1973), Cross (1976), and Wireman (1979), reported that traditional approaches to education were inadequate to meet the needs of the community college student population with its new majority of adult learners. Coward (1978) commented on the growing awareness by college faculty of the need to revise instructional methods and curricula as student profiles become more non-traditional. Webb (1979:33) summarized the dramatic changes:

> The learner over 25 years of age, the underprepared minority student, the vocationally-oriented student -- each represents a subpopulation, increasing in size, which has had, and will continue to have, an impact on higher education that cannot be ignored. These students, by their 'differentness' have created stresses which have forced institutions to examine and change their instructional programs.

In 1979, Florida legislators demonstrated their dissatisfaction with the quality of community college instructional programs by enacting legislation which required that community college graduates be able to demonstrate necessary competencies for the higher level of education. Henderson (1979:2), in an address to the commission planning implementation of the new law, pointed out the urgent need for instructional development:

> Today we know a great deal about how people learn -- infinitely more than was known when many existing academic practices were established. This knowledge along with current techniques of instructional management can be utilized to develop...a logical, cost-effective method of providing quality education to a diverse student population.

Most community colleges in Florida and throughout the nation have instructional development programs or staff development programs or faculty development programs. Under the sponsorship of the American Association of Community and Junior Colleges, the National Council for Staff, Program, and Organizational Development (NCSPOD) was formed in 1977. The Council provided the means for exchange of ideas among the many community colleges which review the activities of development programs on their campuses.

If developmental programs are so proliferated and communicating, why should there be a continued need for quality enhancement of instruction? Perhaps, it is because unenthusiatically attended faculty workshops at the beginning of the terms, unused faculty libraries, and uncoordinated trips to conventions are not adequate as development programs. More probably, however, it is because very few community colleges have effective evaluation procedures for the programs.

Roueche (1973) observed that **earlier in the decade** hundreds of community colleges had remedial programs for low achieving students but only a few were successful. Those successful few were the colleges which had evaluation studies involving student retention data. The same situation would now apply to the hundreds of community colleges offering staff, faculty or instructional development programs. Smith (1977) and Zion (1979) pointed out that, until recently, few instructional development programs have been subjected to any rigorous evaluation process that involved numerical measurements such as attrition rates of students.

Successful students are those who persist in their learning efforts to the completion of courses or programs of study. Evaluations of courses, programs, and colleges must take into account rates of persistence. Since the purpose of community colleges is to turn out successful students, the techniques of instruction must be effective in the attainment of this end.

The Southern Association of Colleges and Schools has stated unequivocally in the Standards of the College Delegate Assembly (1977:9):

> Instruction, to be effective, must be evaluated continuously, and an institution should be able to present evidence that efforts are being made to improve instruction. Concern for improvement of instruction is a mark of institutional vitality.

An instructional development program for community college faculty that failed to reflect and include the perceived needs of the faculty would not only be meaningless but would serve as a poor model for faculty who develop course objectives to meet the needs of their students. The program must therefore involve faculty throughout the planning process. An instructional development program that consisted solely in isolated workshops or infrequent reports from faculty who attended conferences would have little lasting effect on the instructional techniques of faculty members. The program must therefore be consistent and last over a period of time. An instructional development program followed only by a post-assessment can provide only formative evaluation. Evaluation of the program must include pre-assessments as well as post-assessments and must have reference to an objective norm to be summative.

In this study, an attempt has been made to document the step by step development of a faculty planned, semester-long instructional development course for community college faculty. The procedures for implementation and evaluation of the course have been described. The differences between pre-assessment and post-assessment ratings of self-perceived achievement and achievement as measured by an instructional effectiveness inventory have been reported. The evaluation process has also involved the attrition rate of students. The thesis of the study, simply stated, was that improvement of the quality of instruction in a community college through a faculty planned course would be followed by a reduction in the attrition rate of students.

Background and Significance

Florida Keys Community College is located in the southernmost city of the continental United States. It annually serves approximately 3,600 credit students, two-thirds of whom are part-time. When part-time students find that a course does not keep their interest or fill their needs, they are likely to withdraw from the course. And they may not return to take another course.

Student enrollments in the nation's colleges have slowed and may have peaked. The reduced rate of growth in recent years has encouraged colleges to focus attention on student retention as an important means of stabilizing enrollment figures. Both administrators and faculty members have been seeing more clearly the financial benefits of keeping students in the institutions they serve.

In 1978, as reported by the author of this study, faculty members and administrators at the college identified the goal to continue studies relative to student retention and program completion as being of great importance. A task force comprised of students, faculty, staff, and administration was formed to address the issue of student retention. In its final report, the task force identified quality of instruction as a problem related to student retention (Appendix A). The solution suggested for ineffective teaching and unsuitable curricula was the implementation of inservice workshops on teaching methods and related areas that would utilize an in-house consultant system. Acting upon the suggestion of the task force, the Dean of Instruction formed a committee of faculty members to plan and to implement courses for the improvement of offerings and services in the community college.

In the fall of 1978, a college consumer services course was offered for credit to all members of the faculty, administration, and service personnel at the college. Tuition fee waivers and a variety of textbooks and supplementary materials were provided for participants. The semester course was based on the concept that a furthering of mutual understanding and trust in the entire college community would enable faculty, administration, and service personnel to better fulfill the primary mission and goals of the college. The format consisted in approximately 16 hours of group instructional activities led by visiting lecturers and by volunteers from faculty and campus administrative personnel. Participants were encouraged to engage in additional self-directed studies. Formative evaluations derived from the course together with faculty surveys of professional development and instructional effectiveness needs were used to plan the content and format of the subsequent term II instructional development course for community college faculty.

Research Questions

The purpose of this study was to document the development of a satisfactory instructional development course for community college faculty and to describe its impact upon the instructional effectiveness of the faculty and upon the retention of students. The research was developmental and descriptive.

Answers were sought to the following research questions:

1. Did the participants in the instructional development course for community college faculty at Florida Keys Community College express satisfaction with its instructional format?
2. Was there an increase in participant perception of achievement at the completion of the course?
3. Did a comparison of post-assessment ratings with pre-assessment ratings of an instructional effectiveness inventory demonstrate an increase in the areas of instructional design, accommodating individual differences, and educational competencies and goals?
4. Did the percentages of student withdrawals decrease during term II and term III, 1978-79, from that shown in term I following faculty participation in the instructional development course?

Definition of Terms

In the interest of clarity, the following terms were defined operationally:

VARIABLE	OPERATIONAL DEFINITION
(1) Participant Satisfaction	(1) A mean rating of 2.5 or more of items on the evaluation survey.
(2) Participant Perception of Achievement	(2) The positive difference between the post-

			assessment mean rating and the pre-assessment mean rating of perceived expertise in writing about items of the instructional development course modules.
(3)	Instructional Design Effectiveness	(3)	The mean of participants' summated ratings of the 25 items in this area on the Herrscher Instructional Effectiveness Inventory.
(4)	Instructional Effectiveness in Accommodating Individual Differences	(4)	The mean of participants' summated ratings of the 25 items in this area on the Herrscher Instructional Effectiveness Inventory.
(5)	Instructional Effectiveness in Educational Competencies and Goals	(5)	The mean of participants' summated ratings of the 10 items in this area on the Herrscher Instructional Effectiveness Inventory.
(6)	Input Student Semester Hours (SSH)	(6)	Enrollment data reporting at the beginning of each term the number of semester credit hours being taken by all students.
(7)	Output Student Semester	(7)	Enrollment data reporting at

Hours (SSH)	the end of each term the number of semester credit hours completed successfully (A, B, C, D grades) by students.

Assumptions and Limitations

Among the assumptions of the study were the following:

1. That participant evaluation ratings of the instructional development course together with participant perceptions of achievement could measure accurately satisfaction with the course.
2. That the quality of instruction could be measured by comparisons of pre- and post-assessment mean ratings in the areas of the *Herrscher Instructional Effectiveness Inventory*.
3. That a relationship of cause and effect existed between the quality of instruction and the rate of student retention.
4. That participants understood the instructions and responded honestly to items on the survey, assessments, and inventory.

A limitation of the study was that 8 participants who had responded to the pre-assessment participant perception of achievement ratings did not respond to the post-assessment. A further limitation was that 6 faculty members who had responded to the pre-assessment instructional effectiveness inventory did not respond to the post-assessment. Another limitation was that respondents to pre- and post-assessments were not required to identify themselves in order to encourage honesty in responses. Pairings of individual responses were therefore not possible.

Delimitations included the following adjustments in ratings. Since X had no numerical value, the rating for Not Applicable on the Herrscher Instructional Effectiveness Inventory was changed from X to -1. The author of the inventory approved the modification as an aid in using the instrument for research. Items not answered on the inventory was considered Not Applicable and were scored as -1 in both pre- and post-assessments.

CHAPTER II

RELATED LITERATURE

During the past decade, much was written about developmental programs in the community colleges. Faculty development, instructional development, and staff development were titles used almost interchangeably in literature that included newsletters, articles, dissertations, and books. The most popular of the titles was staff development, a term which included the instructors who taught, the administrators who planned and managed, and the personnel who supported the instructional effort.

The literature described the urgent need for quality enhancement, the planning efforts, the workshops, the practices, and in a few cases, the evaluation procedures. Toward the end of the decade, more and more emphasis was placed upon faculty involvement in the specification of needs.

In this review of the literature, an attempt was made to cover briefly each of the following topics: developmental programs in community colleges in the 1970's; selected practices used by community colleges throughout the United States to improve instruction; the relationship between quality of instruction and student attrition; and recent changes in techniques of instruction.

Development Programs in the 1970's

Early in the decade, observers began to focus attention upon the need for quality enhancement in the instructional efforts of community colleges. O'Banion (1973) was one of the first to warn that colleges must turn their attention from the quantity of students and buildings to the quality of instruction and services. If the quality of education in the community college depended upon the quality of the instructional and support staff, then logically it followed that the development of the staff would lead to the development of the students. O'Banion (1974) described student development as the process of learning and growing in which students holistically explored, expanded, and experienced hopeful goals for themselves and for the world in which they lived.

Essential to staff development, according to O'Banion, were the assumptions underlying the community college philosophy: that all staff members wanted to perform their jobs better; that all instructors were interested in increasing their skills, competencies, and understanding of how to teach community college students with diversified backgrounds and abilities; that individual staff members were their own best judges in the identification of personal and professional needs; and that staff members would grow in a climate of college support and reward for development efforts.

College teachers, as reported by Centra (1973), tended to give themselves higher ratings in instruction than did their students. The discrepancies were particularly notable in the areas of student-instructor interaction, course objectives, and the instructor's openness to other viewpoints. Centra had previously noted (1972) the crucial need for faculty development in community colleges. He observed that although some models in use emphasized student achievement of defined instructional objectives as an appropriate measure of teaching effectiveness, there was a lack of research in this area. He also recommended research on teacher characteristics, on instructional practices, and on the interaction of teaching and learning.

Cohen (1973) reported that few practicing community college teachers read professionally about instruction. He ascribed student attrition, in part at least, to instructors' defense mechanisms whereby they would state that students with whom they could not cope did not belong in college. His studies indicated that many community college instructors relied on unrealistic goals and ill-defined outcomes. He recommended that genuine training programs developed around a core of specialized knowledge about community colleges offered the best hope for faculty who had not already been equipped with a wide range of needed techniques.

Summarizing responses of students and faculty in a representative sample of the member institutions of the Council of North Central Community Junior Colleges, Romine (1974) raised a serious question as to how well community/junior colleges were fulfilling their professed primary purpose of teaching. The study clearly indicated the need for increasing student and faculty concern about the quality of instruction.

In reviewing the literature concerning faculty development programs in community colleges, Christensen (1975:36) concluded:

> Laced throughout the literature is the need

> for staff development programs at community colleges. Faculty for these colleges come from a wide range of sources and have a variety of backgrounds. For the most part, they have had little contact or exposure to the two-year college. In addition, many community college faculty have stated that their pre-service training did not prepare them adequately for their present responsibilities.

The Christensen study, incidentally, found that both faculty and administrators agreed in the perception of developmental needs as measured by the Raines Professional Needs Survey, the survey used in this study.

Reporting the results of a survey of faculty in five south Florida community colleges, Handleman (1975) warned on the other hand that educators should not be so concerned with accommodating and retaining students that they lose perspective about what is good education. Most supported the lecture-discussion format as the most efficient and practical method of instruction.

In describing gaps in the research literature reporting inservice education for community college staff, Wallace (1975) pointed out the need for more literature concerning successful campus wide models for staff development that included guidelines for implementation.

Hammons (1975) recommended that the planning process for staff development include the identification of needs by participants and suggested the use of national or regional surveys for this purpose. He reported that, following simulation exercises, participants in a conference representing more than 50 community colleges agreed in the following recommendations: that overall responsibility for staff development be given to one person or team; that all elements of the college staff be involved in planning, implementing, and evaluating the developmental program; that developmental programs receive high priority and adequate support; that the programs meet the identified needs; and that the evaluations be formative for the improvement of ongoing programs.

Hammons and Wallace (1976) reported on the growing rate of concern with staff development in community colleges. A survey of the inservice training needs of two-year colleges in the northeastern United States indicated definite staff development needs in three areas: those related to the unique role of the community college; those related to instruction; and, finally, the needs related to administration.

Noting an upsurge of interest in faculty development, Centra (1976) cited among the reasons the following, a decrease in faculty mobility due to the declining rate of growth in colleges; an expression of general disenchantment by students and legislators with the quality of college instruction; and a generous increase in the support of faculty development provided by public and private funding agencies. Respondents in a sample that included 93 universities, 315 four-year colleges and 326 two-year colleges provided estimates of the effectiveness of various faculty development practices. The findings suggested that beginning teachers might profit from faculty development programs because they had learned little about teaching itself in graduate school. Older teachers might profit because they had become stale in methods, preparation, or outlook, and this would become apparent to students.

Two-year colleges, according to Centra, tended to emphasize staff rather than faculty development with the implication that administrators and other staff could improve some part of their professional functioning. Significantly, only fourteen (14%) percent of the respondents reported that they had evaluated their activities in the developmental program, an additional thirty-three (33%) percent had done partial evaluations but about half the programs had not been evaluated at all. To increase faculty participation in programs, the study recommended that they be tailored to faculty needs and interests as determined by an inventory of faculty perceived needs and interests.

One of the most pressing needs in community college education, as seen by Claxton (1976), was well-planned staff development programs. He reported that a workshop on staff development programs sponsored by the Southern Regional Education Board concluded that staff development needs should be assessed through inventories, questionnaires or discussions. Among the characteristics of the recommended approach to staff development were: relating it to the mission of the institution, planning and organization by faculty who volunteered their participation, a design based upon expressed needs, and continuous activities throughout the year.

References were made frequently in the literature to the guidelines that directed the staff and program development in

Florida's 28 public community colleges. In April, 1976, the Department of Education, State of Florida, published a report entitled Staff and Program Development in Florida's Community Colleges, 1974-75. The report contained the guidelines, forms, restrictions, and an analysis of activities.

Most references praised the requirement that each of the Florida community colleges submit to the division of community colleges an annual evaluation accounting for staff and program activities. The system had components of an effective evaluation, such as clear statements of both long-range and short-range goals and objectives and the use of an external evaluation agency. As noted by Smith (1977), however, the system also had a number of weaknesses. The evaluation relied heavily on internal self-reports by the institution, a possibly biased form of evaluation, and it used one standardized format for reporting that discouraged experimentation.

Smith reported that elsewhere in the United States very few staff development programs have effective evaluation procedures. He distinguished between formative evaluation, which would be continuous throughout the program and concerned with the planning and implementation of the program, and summative evaluation, which would assess the overall effectiveness of the completed program. He concluded that little evidence existed that effective evaluations of staff development programs were taking place. Evaluations tended to be anecdotal or simply descriptions of participants.

In evaluating programs of instructional development, Cohen and Brawer (1977) noted that instructors' interpretations of self were keys to understanding the extent of their development. Faculty members who saw themselves as cloistered classroom teachers of academic studies became uncertain recluses isolated within their own institutions. Instructional innovators, on the other hand, identified themselves with the discipline of instruction by becoming program heads, instructional coordinators, and laboratory managers. Cohen and Brawer agreed that because the discipline of instruction lacked an infrastructure of research and dissemination, the faculties of two-year colleges did not know how to upgrade each other's skills.

In reporting a nationwide survey of the faculty teaching two-year college courses in the humanities, Cohen (1977) noted that respondents wanted further professional development and that at least half felt that satisfactory opportunities for inservice training in this type of instruction were not available at their own colleges.

Claxton (1977) observed that community colleges could no longer depend on infusions of new strengths and ideas from new faculty because of the decreased mobility of faculty. He proposed a model for instructional development that included: evaluations, diagnoses, micro-teaching, methodology, technology, curricular development, and analysis of collected data by the campus office of institutional research.

Drucker (1977:272-3) emphasized the need for evaluation in professional growth:

> ...knowledge workers must be able to appraise

> their contributions. It is commonly said that research is 'intangible' and incapable of being appraised. But this is simply untrue...In fact, unless knowledge workers are made to review, appraise and judge, they will not direct themselves toward contribution. And they will also feel dissatisfied, non-achieving and altogether 'alienated.'

O'Banion (1977) reported that the American Association of Community and Junior Colleges conducted four regional workshops on staff development in 1977. In the same year, leading administrators in 48 colleges of the League for Innovation in the Community College listed staff development as having highest priority. Novak and Barnes (1977) likewise reported that in another survey highest priority was given to developing better teaching skills and techniques and to understanding students by administrators, faculty members, and student personnel workers in Florida.

As the decade of the seventies neared its close, writers placed greater emphasis upon the assessment of needs by faculty and upon more rigorous evaluation of results of instructional development programs. O'Banion (1978) recommended formal assessment of institutional and personal/professional needs as a necessary first step. He recommended the use of the questionnaire developed by Max Raines of Michigan State University but noted that in recent years a number of such instruments have been made available for the purpose of assessing professional needs. He noted that assessment results should be provided appropriate committees for recommendations concerning implementation. He considered approval from the faculty through respected members serving on committees to be a most important step if the staff development program designed to meet their needs were to receive acceptance. O'Banion recommended the sharing of assessment results with the entire faculty to underscore the importance of the faculty development program.

Harvey (1978) suggested that a professional development committee be set up to study needs and to structure the program. He pointed out that the need for professional development ought to come from several points: evaluation of weaknesses; individual professional needs (awareness of where their career ladders are leading); and institutional objectives.

More specifically, Gross (1978:35) recommended the use of faculty growth contracts as almost a necessity in this era of close scrutiny of faculty performance:

> While a clearer accounting of faculty productivity seems appropriate, there is also need for faculty as professionals to retain the initiative in defining their roles and areas of needed development. Growth contracts enhance accountability. At the same time they grant faculty broad prerogatives related to the specifics of their professional functioning.

Gross further noted that faculty seem to be a special kind of professionals who strongly resist external attempts to change their mode of functioning. The strength of the individual growth contract plan is that it is self-imposed and continuing. A continued assessment of individual strengths and weaknesses is essential to growth. The subsequent specific statement of plans for improvement must include means of evaluation.

In underscoring the need for more rigorous evaluation of staff development programs, O'Banion (1978) recommended three levels of evaluation. First, there should be simple counting devices: the number of faculty members participating in the activities and direct feedback from participants on evaluation questionnaires. The second level of evaluation should measure self-reported changes in the understandings and attitudes of participants in the program. The third level of evaluation should concern the purpose of staff development as it related to student development. Did improved instructional development lead to improved student development?

In reviewing growth of staff development programs in community colleges in the seventies, Zion (1979:29) reported the establishment and functioning of the National Council for Staff, Program, and Organizational Development (NCSPOD). For the previous two years this organization has provided the means for exchange of ideas among the many community colleges which review the activities of staff development on their campuses. She pointed out:

> The best staff development programs are based on assessed needs of the institution, and are closely related to institutional goals...Under the best circumstances, the priorites for the staff development program are selected from the campus objectives and buttressed by a needs survey of the staff...In this way, institutional goals and personal/professional goals can merge and be serviced by the development program.

In a final word, she further noted that until recently few developmental programs have been subjected to any rigorous evaluation process that involved numerical measurements such as percent of faculty utilizing competency based objectives or attrition rate of students.

Selected Practices Used to Improve Instruction

Brief descriptions of staff or instructional development programs at community colleges in Florida, North Carolina, Illinois, Michigan, and Maryland have been taken from the limited literature, other than newsletters, that outlines such programs.

Clements (1975) reported staff development at Lake City (Florida) Community College. The program director involved faculty committees and the administrative council in the establishment of priorities and program objectives. Among the objectives for 1973-74 were: to provide the faculty with an orientation to computer assisted instruction; to provide faculty with an orientation to individualizing instruction and writing performance objectives; and to conduct an annual educational needs assessment. Mini-workshops were the principal vehicle and utilized presentations by nationally known consultants. The committee system was used to develop proposals for federal and state grants. The system was found to be effective by the program director in encouraging staff growth in preparing position papers and in the selection of project officers.

Staff Development: A Profile of Local Institutional Effort (1975) reported staff development activities of the 57 institutions in the North Carolina system during the previous year. The report concluded that inadequate opportunities were provided to meet the needs of personnel and that training in a common set of instructional techniques was needed by all faculty. The department presented a graphic representation of a comprehensive staff development model with instructions for use and forms for reporting. Faculty development was considered to be the responsibility more of the individual than of the institution since each individual must responsibly make career planning decisions that affect his/her professional growth. The total institutional plan, therefore, consists in the summary of all the annual individual plans for professional growth.

The procedure for staff development at Oakton (Illinois) Community College, as reported by Mittler (1975), included: suggestions for offerings by staff, analysis of interest surveys; modules (workshops) led by staff, community experts, and external consultants; meetings of staff development committee to coordinate arrangements and publicity; analysis of evaluation data by the committee to assess program direction, organization, and overall effectiveness. Mittler reported that eighty (80%) percent of 911 participants in 44 modules judged the module they attended to have been beneficial.

The Faculty Development Program 1976/77 (1976) of William Rainey Harper College (Illinois) announced activities which would include: seminars, presenters, facilitators, and discussions on preplanned topics. Special attention was to be given to new instructors in 12 weekly sessions on the following topics: philosophy and institutional goals; community and student profile; learning laboratory; learning strategies practiced in selecting community colleges; maximizing student human development potential; instructional strategies at Harper; instructional specifications; learning support services; instructional materials preparation; computer assisted instruction; grading and academic standards; and needs assessments. Additionally, new faculty members were assigned mentors to insure their introduction to the institution. New faculty were also given a suggested reading list of books and publications to establish a background in the community college.

Cooper (1976) described the needs assessment, the planning process, and the plan for professional development at Lansing (Michigan) Community College in 1976-77. A committee, under the direction of the program coordinator, would develop criteria and methodology for program evaluation and would annually revise the needs assessment. A 16 item needs assessment questionnaire was appended without reference to validity or reliability studies.

Parsons (1976) described the instructional clinic at Hagerstown (Maryland) Junior College. The clinic used a pragmatic process to gather and prioritize staff concerns. Attendance at the 14 sessions of the 1975-76 year averaged 20 persons. Among the issues addressed were: lack of reading skills, testing, unevenness of research skills in students, and instruction evaluation. Outcomes included: a readibility index model available to faculty; computer capabilities for validity and reliability indices and for Chi-square tests and correlations; modules in professional literature and term papers; and a popular video-tape model of instructor evaluation. Only formative evaluation was considered relevant to the instructional clinic since it was in the process of evolving. Three questions were asked: what results were accomplished, how effective were the results, and what modifications were indicated as needed to make the process more effective.

Relationship Between Instruction and Attrition

The literature was very limited in references to the relationship between the quality of instruction and student attrition. When educators were asked if quality instruction had a positive effect on student retention, they quickly replied in the affirmative but, in fact, little evidence supported the response. What evidence had been presented was more anecdotal than empirical.

Cohen and Brawer (1971:10) commented on the relationships of student and teacher in community colleges that led to retention or attrition:

> Although the instructor formulates his own courses, develops and uses certain instructional methods, and establishes practices that may activate students' decisions to stay or drop from school, few studies have examined the differential retentive capacities of instructors...While the teachers' ability to sustain the interest and attention of their students would seem to be a major determinant of success in teaching, this variable is rarely included in investigations of academic mortality rates.

Among doctoral dissertations dealing with teacher influence on retention rates, Jablonsky (1974) noted that studies conducted in school districts and vocational secondary schools indicated a causal relationship between quality instruction and holding power. No studies conducted in postsecondary institutions were reported under this heading in her annotated bibliography.

Terenzini and Pascarella (1976) reported a study of a random sample of freshman students at Syracuse University that indicated attrition was a behavioral outcome of students' non-integration in the academic and social spheres. Their study highlighted the observation that the amount of informal contact between instructors and students was significantly associated with student persistence at the institution.

Horvath (1979) reported efforts to reduce attrition rates at Jefferson (Kentucky) Community College. It was found that approximately forty (40%) percent of class enrollments received either a failing grade or withdrew from the course. Workshops generated 63 ideas published in a handbook that emphasized faculty/student interaction, general classroom management, student initiated activities, and faculty initiated activities. No results of the handbook or ideas upon the reduction of the attrition rate were reported.

Recent Changes in Techniques of Instruction

A theory of instruction should establish rules concerning the most effective way of achieving knowledge or skills in the learner. According to Bruner (1966), no prescriptive theory existed. In the absence of a prescriptive theory of instruction, assumptions were made that instructors have already been equipped with a wide range of previously invented techniques and that systematic interaction with learners would result in their achieving knowledge or skills. Little evidence in the literature supported the assumptions.

Knowing is a process, not a product. To instruct is to involve learners in the process that makes possible the establishment of knowledge. Bruner therefore inferred that if instructors have not already been equipped with a wide range of tested techniques then the instructors should be involved, as learners, in the process of knowing the techniques. They should have the specific experience of creating a curriculum of instruction, trying it out in learning activities, and making an effort to assess it. Their evaluations would contribute to the development of a theory of instruction capable of wide acceptance.

The concept of mastery learning developed by Bloom (1968) was one of the most important educational presentations of recent years. He asserted that most students (perhaps over 90 percent) could master what instructors had to teach them, given sufficient time and clear understanding of exactly what was expected of them. It was the task of instruction to search out the methods and materials that would enable students to master the subject under consideration. The specification of the objectives and content of instruction was necessary if both instructors and learners were to be informed about the expectations of the instruction.

Bloom pointed out that previously a standard method of instruction had been sought and practiced. The standardization had been emphasized by a common textbook for all, by an established teacher-student ratio, and by group instruction as the central means of teaching. A change was needed. The quality of instruction could be judged in terms of its effects on individual learners. Instead of the common textbook, a particular student might need the drill a workbook could provide, the reinforcement offered by programmed units, the demonstrations available in film strips or whatever variety of materials and activities that would be useful as indicated by the student's special interests and needs. The strategy of mastery learning was to find how to deal with individual differences in learners by relating the instruction to the needs and special characteristics of the learners.

Bloom stated his conviction that if colleges did not promote mastery learning in which students viewed themselves as adequate and reinforced by society, then the students could not help but reject learning both in the classroom and in later life. The major goal of the educational system should be to give zest to learning and to develop in students a lifelong interest in learning.

Roueche (1973) pointed out that community colleges were comprehensive educational institutions developed to broaden the ways to meet educational needs that had been ignored by traditional institutions. He observed that many accepted instructional procedures were being questioned. Reliance on lectures and a common textbook to the neglect of other instructional activities were a restrictive approach to the learning process. He cited research showing that the use of organized instructional sequences, capable of meeting the learners' paced needs, to reach specified objectives could practically guarantee learning for almost all students.

Herrscher (Roueche and Herrscher, 1973) developed and proposed a systems approach to instruction. The approach, as conceptualized, involved six basic steps: rationale, specific instructional objectives, pre-assessment, learning activities, post assessment, and revision.

Through the rationale, the learner is shown the reason the material has been included in the unit and the goals of the instructor to which the learner may react. The objectives state in performance terms what the student should be able to accomplish after having completed the unit. The pre-assessment indicates the starting levels of the learners and facilitates a discerning diagnosis of needs for each student. Among the learning activities are a number of non-traditional approaches that include: use of the environment in field trips and demonstrations, use of pictorial devices in replayable televised lectures by the instructor explaining complex technology or terms, and use of verbal approaches both spoken and written. The post-assessment enables the learner to demonstrate mastery of a unit so as to move on to the next unit. Demonstrated non-mastery requires recycling of the learner and dictates the pacing of instruction. Revision provides important feedback for the instructor so that the unit may be modified to better fill the needs of future learners.

Herrscher further observed that a generation ago, college instruction consisted essentially in two steps: learning activities (usually lecture-discussion) and post-assessment. Herrscher stated (Roueche and Herrscher, 1973:50):

> The assumption that the traditional two-component instructional system is best has been proven invalid. Adoption of a true systematic approach to instruction incorporating a rationale, specific objectives, pre- and post-assessment, validated learning activities, and feedback, along with redirection and recycling of students as needed, can be a potent force for instructional improvement.

Herrscher pointed out the difference between the norm-referenced approach to evaluation traditionally used and the newer criterion-referenced approach to measuring the progress of mastery learning in students. In the norm-referenced approach, the so-called normal curve is a guide to assigning grades on the assumption that the class, no matter what its size or bias, is average. In the criterion-referenced approach, established and understood performance standards permit mastery of objectives as the basis for grading and acknowledge the fact that learners are not a group but rather individuals with different learning rates. The criterion-referenced approach uses testing to assess instruction whereas the norm-referenced approach uses testing to sort students.

Hammons and Wallace (1976) investigated the inservice needs of two year college instructors in the northeastern United States. Their data indicated clearly that individualized instruction was a major problem area. There was need for upgrading staff in the concepts of mastery learning, behavioral objectives, and cognitive mapping. More than half the respondents stated that inservice education was needed for instructors in aspects of mastery **learning**, such as the development of proper test items. Among the major concerns noted in the survey were: criterion-referenced testing, competency based learning, and course evaluations.

Hammons (1977) predicted that the next decade would find the forerunners among community colleges experimenting with total systems of instruction. Evidence clearly indicated increasing interest in instruction focused upon the individual rather than the group. The eighties would be the era for mastery learning (the single most likely innovation), a continuing search for the best match between teaching and learning styles, and increased interest in evaluation (formative, summative, diagnostic, norm-referenced, and criterion-referenced).

CHAPTER III

PROCEDURES AND METHODOLOGY

Planning the Instructional Development Course

In the fall of 1978, faculty members (28) at Florida Keys Community College responded to the Herrscher Instructional Effectiveness Inventory (Appendix B). The inventory used was the validation edition (fourth revision of checklist developed in 1974 on the basis of data from 300 faculty members from 22 community colleges in 9 states) prepared by Barton R. Herrscher for suggested use as a 60 item pre- and post-assessment instrument for institutions wishing to undertake college-wide programs of instructional improvement. The 60 items of the inventory were grouped under the headings of Instructional Design (25), Accommodating Individual Differences (25), and Educational Competencies and Goals (10).

Participants rated each of the 60 items in the following manner: -1 (not applicable), 0 (rarely/never), 1 (sometimes), 2 (usually), and 3 (always). The ratings were summated and the mean derived for each item. Items the mean ratings of which were less than 2 were considered instructional effectiveness needs. As reported by the author of this study (Fitzgerald, 1979), 34 items were identified as instructional effectiveness needs. The Curriculum Committee of the Florida Keys Community College faculty considered the identified needs and recommended that 31 of the needs be included in the content of the planned instructional development course. Included in the course content as a result of this recommendation were items 6, 9, 10, 11, 15, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 30, 31, 34, 35, 36, 43, 44, 45, 46, 47, 48, 49, 54, 55, 56, 57.

In October, 1978, full-time faculty members (29) at Florida Keys Community College responded to the Raines Professional Developmental Needs Survey (Appendix C). Originally developed by Raines (1973), the survey instrument had been modified, validated, and found reliable by Christensen (1975). The survey consisted of 22 items that measured respondents' perceived needs for professional development.

Participants rated each of the 22 items in the following manner: 1 (extremely irrelevant), 2 (somewhat irrelevant), 3 (fairly relevant), and 4 (extremely relevant). The ratings were summated and the mean derived for each item. Items on the Professional Development Needs Survey the mean ratings of which were 3 or more were considered to be faculty development needs. As reported by Caron (1979), 15 items were identified as faculty development needs. The Professional Policy Committee of Florida Keys Community College considered the identified needs and recommended that all 15 be included in the content of the planned instructional development course. Included in the course content as a result of this recommendation were items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 19, 21, and 22. Items were re-arranged in logical sequence by the committee to facilitate presentation in the planned instructional development course. The committee recommended the following development by modules:

Module A The Educational Process: Teaching Strategies/Learning Styles and Cognitive

Mapping (items 8, 9, 10, 11).

Module B Developing and Utilizing Pre-Post-Assessment in Course Planning (items 1, 2, 4).

Module C Constructing and Evaluating Competency-Based Objectives (items 5, 6, 7).

Module D Elements and Methods of Practical Research (items 3, 21, 22).

Module E Developing the Faculty/Counselor/Student Relationship (items 13, 19).

The Dean of Instruction formed a Course Planning Committee that included the Chairperson of the Curriculum Committee, the Chairperson of the Professional Policy Committee, and three volunteer faculty members. The Planning Committee further developed the modular outline to include the identified and recommended instructional effectiveness needs.

In the fall of 1978, all members of the faculty (31), administration (17), and service personnel (42) at Florida Keys Community College had enrolled in a consumer services course for community college personnel. The instructional format included approximately 16 hours of group instructional activities led by visiting lecturers and by volunteers from among faculty and administrative personnel together with an undetermined number of hours of self-directed study by participants. In November, 1978, as reported by the author of this study (Fitzgerald, 1979), participants expressed satisfaction with the instructional format. The decision was made by the

Course Planning Committee to continue the use of the instructional format in the planned instructional development course.

Prominent educators at Nova University, University of Texas at Austin, and Wichita State University were invited by the Dean of Instruction to lead the group discussions planned for Modules A, B, D, and E. Faculty members from the Course Planning Committee volunteered to make the presentations and provide leadership for the content of Module C.

The Dean of Instruction, the instructor of record for the instructional development course, and the members of the Course Planning Committee wrote the syllabus/course outline which included the course title, description, goals, rationale, prerequisites, procedures, texts, schedule, modules, and specific objectives (Appendix D).

Four topics were selected at random from the items grouped under each of the five modules. In November, 1978, 38 faculty members and administrators responded to the twenty topics arranged as a pre-assessment. They rated their perceived expertise in writing a 250 word paper on each of the topics in the five modules of the planned instructional development course. The ratings were: 0 (at a complete loss for words); 1 (able to write but would lack confidence); 2 (feel fairly secure in handing in the paper); and 3 (able to handle the topic with great confidence). After the ratings had been summated, the mean ratings were derived for each of the twenty items. The results were reported to the planning committee as a pre-assessment survey (Appendix E), and to the visiting lecturers as an instructional aid to help in their preparation of instructional approach, materials, and activities.

Implementing the Course

In December, 1978, 43 members of faculty and administration enrolled in the instructional development course. On January 2, 1979, Barton R. Herrscher, Professor of Education at the University of Texas at Austin and author of the *Instructional Effectiveness Inventory*, presented Module A to 29 participants and Module B to 28 participants in morning and afternoon sessions of three hours each (Appendix F). Subsequently, the Dean of Instruction requested participants, on the basis of the presentations and class discussions, to submit brief papers describing effective teaching, testing or grading techniques to be included in a digest for distribution to all faculty (Appendix F).

On January 9, 1979, the Dean of Instruction met with the Course Planning Committee to finalize plans for the presentation of Module C in three sessions by volunteer members of the committee (Appendix F). The materials were presented in one hour sessions to 27 participants on January 16, to 28 participants on January 30, and to 29 participants on February 13. At the latter meeting, copies of *A Summary of Some On-Going Individualized Instructional Procedures* were distributed (Appendix F).

On February 23, Ross E. Moreton, Acting Director of the Nova University for Higher Education, presented the material on practical research and its application in instruction in

Module D to 19 participants. In the session, opportunity was given to individual participants to discuss specific problems and concerns in research (Appendix F). Participants who had been absent from Module D and who wished to make up the work missed were invited by the Dean of Instruction to confer with him concerning a make-up assignment (Appendix F).

On March 9, David Meabon, Dean of Student Life and Services at Wichita State University, presented the material on developing the faculty/counselor/student relationship in Module E to 26 participants. He later distributed to participants supplemental materials pertinent to his presentation through the office of the Dean of Instruction.

Measuring the Results

On completion of the instructional development course, 30 participants responded to a survey of participant satisfaction that had previously been validated and found reliable (Fitzgerald, 1979). Participants rated each of 14 items on the evaluation survey by assigning them letter grades: A = 4, B = 3, C = 2, D = 1, and F = 0. The ratings were summated and the mean derived for each item. Participant satisfaction was considered to be a mean of 2.5 or more. The results were used to respond to the first research question: Did the participants in the instructional development course for community college faculty express satisfaction with its instructional format?

Upon completion of the course, 30 participants also responded to a post-assessment which was an exact duplication of the pre-assessment to which 38 members of the faculty and administration had responded in November, 1978. The post-assessment surveyed participant perceptions of confidence in writing knowledgeably about 20 topics arranged in groups of four each under the headings of the five modules presented in the instructional development course. Participant perception of achievement was measured by a comparison of the derived mean of the summated post-assessment ratings with the derived mean of the summated pre-assessment ratings. The results responded to the second research question: Was there an increase in participant perception of achievement at the completion of the course?

Upon completion of the course, 22 members of the faculty who had responded to the Herrscher Instructional Effectiveness Inventory as a pre-assessment instrument responded again to the inventory as a post-assessment. Since not all of the items had been included in the course content, a comparison of summated ratings in pre- and post-assessment item by item was not attempted. Instead, the ratings of the 25 items under the Instructional Design heading were summated for each respondent in both the post-assessment and the pre-assessment. The derived mean of the summated post-assessment ratings was compared with the derived mean of the summated pre-assessment ratings under this heading to determine if an increase had occurred. The same procedure was followed for the 25 items under the Accommodating Individual Differences heading and for the 10 items under the Educational Competencies and Goals heading. Results responded to the third research question:

Did a comparison of post-assessment ratings with pre-assessment ratings of an instructional effectiveness inventory demonstrate an increase in the areas of instructional design, accommodating individual differences, and educational competencies and goals?

At the conclusion of the 1978-79 year, withdrawal data as measured by Student Semester Hours (SSH) were gathered from the Office of the Registrar at Florida Keys Community College. The total input SSH less the total output SSH for each of the three terms of 1978-79 equaled the total SSH loss for each term. The term total SSH loss divided by the term total input SSH demonstrated the percent of loss for each term. The percentages of loss responded to the fourth research question: Did the percentages of student withdrawals decrease during term II and term III, 1978-79 from that shown in term I following faculty participation in the instructional development course?

CHAPTER IV

PRESENTATION OF RESULTS

Each of the four research questions was answered affirmatively. The participants in the instructional development course for community college faculty expressed satisfaction with its instructional format and demonstrated an increase in both perceptions of achievement and ratings of instructional effectiveness in the areas of instructional design, accommodating individual differences, and educational competencies and goal. The percentages of student withdrawals decreased during term II and term III, 1978-79 from that shown in term I following faculty participation in the instructional development course.

Participant Ratings of Satisfaction

Upon completion of the instructional development course, participants rated each of 14 items on the evaluation survey. Ratings were equated to letter grades: A = 4, B = 3, C = 2, D = 1, and F = 0. The ratings were summated and the mean derived for each item. Participant satisfaction was considered to be a mean rating of 2.5 or more.

The first five questions on the evaluation survey concerned course content and objectives. The mean rating for item 1 (Did the assignments and group activities reinforce your learning?) was 3.33. The mean rating for item 2 (Did the course increase your sense of responsibility for your own learning?) was 3.23. The mean rating for item 3 (Were the modules and their content helpful to you?) was 3.10. The mean rating for item 4 (Have your experiences increased your desire to explore the subjects further?) was 3.10. The mean rating for item 5 (What overall grade would you give the course?) was 3.13. All mean ratings expressed participation satisfaction and are displayed in Table I.

TABLE I

PARTICIPANT RATINGS OF SATISFACTION WITH THE CONTENT OF THE INSTRUCTIONAL DEVELOPMENT COURSE

Evaluation Survey Item	Mean Rating N = 30
1. Did the assignments and group activities reinforce your learning?	3.33[a]
2. Did the course increase your sense of responsibility for your own learning?	3.23[a]
3. Were the modules and their content helpful to you?	3.10[a]
4. Have your experiences increased your desire to explore the subjects further?	3.10[a]
5. What overall grade would you give the course?	3.13[a]

[a] Satisfaction is a mean rating of 2.5 or more.

The next four questions on the evaluation survey concerned instructional services. The mean rating for item 6 (Were effective methods of instruction used to teach the course?) was 3.23. The mean rating for item 7 (Were the course objectives made clear to you?) was 3.37. The mean rating for item 8 (Did you receive the kind of help from **group leaders** you needed?) was 2.97. The mean rating for item 9 (Would you recommend the course to other faculty?) was 3.27. All mean ratings expressed participant satisfaction and are displayed in Table II.

TABLE II

PARTICIPANT RATINGS OF SATISFACTION WITH THE INSTRUCTORS OF THE INSTRUCTIONAL DEVELOPMENT COURSE

Evaluation Survey Item	Mean Rating N = 30
6. Were effective methods of instruction used to teach the course?	3.23[a]
7. Were the course objectives made clear to you?	3.37[a]
8. Did you receive the kind of help from group leaders you needed?	2.97[a]
9. Would you recommend the course to other faculty?	3.27[a]

[a] Satisfaction is a mean rating of 2.5 or more.

The final five questions on the evaluation survey concerned participant involvement in the course. The mean rating for item 10 (Did you attend classes regularly?) was 3.37. The mean rating for item 11 (Did you prepare in advance for each meeting?) was 2.87. The mean rating for item 12 (Did you exchange learning experiences with other participants?) was 3.03. The mean rating for item 13 (Did you discuss the course for your progress with your group leaders?) was 2.63. The mean rating for item 14 (What overall grade would you give yourself?) was 3.60. All mean ratings expressed participant satisfaction and are displayed in Table III.

TABLE III

PARTICIPANT RATINGS OF SATISFACTION WITH THEIR OWN INVOLVEMENT IN THE INSTRUCTIONAL DEVELOPMENT COURSE

	Evaluation Survey Item	Mean Rating N = 30
10.	Did you attend classes regularly?	3.37[a]
11.	Did you prepare in advance for each meeting?	2.87[a]
12.	Did you exchange learning experiences with other participants?	3.03[a]
13.	Did you discuss the course or your progress with your group leader?	2.63[a]
14.	What overall grade would you give yourself?	3.60[a]

[a] Satisfaction is a mean rating of 2.5 or more.

Participant Perceptions of Achievement

In both the pre-assessment and the post-assessment forms, participants rated their perceived expertise in writing a 250 word paper on each of the topics in the five modules of the instructional development course. The ratings were: 0 (at a complete loss for words); 1 (able to write but would lack confidence; 2 (feel fairly secure in handing in the paper); and 3 (able to handle the topic with great confidence). After the ratings had been summated, the mean ratings were derived for each item in both the pre-assessment and the post-assessment. When the post-assessment mean rating exceeded the pre-assessment mean rating, the positive difference was considered to be a participant perception of achievement.

In the Educational Systems Approach Module, a positive difference indicating participant perception of achievement occurred in each of the four items. Use of re-cycling in systems approach received a post-assessment mean rating of 2.03 and a pre-assessment mean rating of 1.03. The positive difference was 1.00. Locus of control in social learning theory received a post-assessment mean rating of 1.90 and a pre-assessment mean rating of 1.00. The positive difference was .90. Effect of instructor expectancies received a post-assessment mean rating of 1.70 and a pre-assessment mean rating of .61. The positive difference was 1.09. Differences in styles of learning received a post-assessment mean rating of 2.47 and a pre-assessment mean rating of 1.66. The positive difference was .81. The mean ratings and positive differences for the Educational Systems Approach Module items are displayed in Table IV.

TABLE IV

ACHIEVEMENT RATINGS: EDUCATIONAL SYSTEMS APPROACH MODULE

Module Topic	Post-Assessment N = 30 $\overline{X}_1$	Pre-Assessment N = 38 $\overline{X}_2$	Difference $\overline{X}_1-\overline{X}_2$
1. Use of re-cycling in systems approach.	2.03	1.03	1.00
2. Locus of control in social learning theory.	1.90	1.00	.90
3. Effect of instructor expectancies.	1.70	.61	1.09
4. Differences in styles of learning.	2.47	1.66	.81

In the Pre- and Post-Assessments Module, a positive difference indicating participant perception of achievement occurred in each of the four items. Norm versus criterion referenced testing received a post-assessment mean rating of 2.30 and a pre-assessment mean rating of 1.05. The positive difference was 1.25. Formative versus summative evaluations received a post-assessment mean rating of 2.03 and a pre-assessment mean rating of .95. The positive difference was 1.08. Bloom's taxonomies of learning objectives received a post-assessment mean rating of 1.97 and a pre-assessment mean rating of 1.00. The positive difference was .97. How to encourage learning for mastery received a post-assessment mean rating of 2.37 and a pre-assessment mean rating of 1.37. The positive difference was 1.00. The mean ratings and positive differences for the Pre- and Post-Assessments Module items are displayed in Table V.

TABLE V

ACHIEVEMENT RATINGS: PRE- AND POST-ASSESSMENTS MODULE

Module Topic	Post-Assessment N = 30 $\bar{X}_1$	Pre-Assessment N = 38 $\bar{X}_2$	Difference $\bar{X}_1-\bar{X}_2$
1. Norm versus criterion referenced testing.	2.30	1.05	1.25
2. Formative versus summative evaluations.	2.03	.95	1.08
3. Bloom's taxonomies of learning objectives.	1.97	1.00	.97
4. How to encourage learning for mastery.	2.37	1.37	1.00

In the Competency Based Objectives Module, a positive difference indicating participant perception of achievement occurred in each of the four items. Tyler rationale of curriculum decisions received a post-assessment mean ratings of 1.53 and a pre-assessment mean rating of .61. The positive difference was .92. Formulation and implementation of competency statements received a post-assessment mean rating of 1.73 and a pre-assessment mean rating of 1.00. The positive difference was .73. Definition of Competency Based Education received a post-assessment mean rating of 1.83 and a pre-assessment mean rating of 1.18. The positive difference was .65. Student assessments other than written tests received a post-assessment mean rating of 1.97 and a pre-assessment mean rating of 1.11. The mean ratings and positive differences for the Competency Based Objectives Module items are displayed in Table VI.

TABLE VI

ACHIEVEMENT RATINGS: COMPETENCY BASED OBJECTIVES MODULE

Module Topic	Post-Assessment N = 30 $\overline{X}_1$	Pre-Assessment N = 38 $\overline{X}_2$	Difference $\overline{X}_1-\overline{X}_2$
1. Tyler rationale of curriculum decisions.	1.53	.61	.92
2. Formulation and implementation of competency statements.	1.73	1.00	.73
3. Definition of Competency Based Education.	1.83	1.18	.65
4. Student assessments other than written tests.	1.97	1.11	.86

In the Research and Application Module, a positive difference indicating participant perception of achievement occurred in each of the four items. Florida Educators' Information Service received a post-assessment mean rating of 1.53 and a pre-assessment mean rating of .61. The positive difference was .92. Educational Resources Information Center received a post-assessment mean rating of 1.73 and a pre-assessment mean rating of 1.00. The positive difference was .73. Course objectives in interrelated disciplines received a post-assessment mean rating of 1.83 and a pre-assessment mean rating of 1.18. The positive difference was .65. Evaluations of instruction received a post-assessment mean rating of 1.97 and a pre-assessment mean rating of 1.11. The positive difference was .86. The mean ratings and positive differences for the Research and Application Module items are displayed in Table VII.

Immediately prior to the presentation of the Module, the Florida Educator's Information Service was restricted, because of funding changes, to vocational education, occupational, and career education topics. It no longer provided public education information support services to public education institutions. Notice was received that requests for information would be handled by Florida Resources in Education Exchange (FREE). It should be noted also in reviewing the results of the ratings of the Research and Application Module that only 19 participants attended the presentation of the Module but 30 participants responded in the post-assessment.

TABLE VII

ACHIEVEMENT RATINGS: RESEARCH AND APPLICATION MODULE

	Module Topic	Post-Assessment N = 30 $\overline{X}_1$	Pre-Assessment N = 38 $\overline{X}_2$	Difference $\overline{X}_1-\overline{X}_2$
1.	Florida Educators' Information Service.	1.53	.61	.92
2.	Educational Resources Information Center.	1.73	1.00	.73
3.	Course objectives in interrelated disciplines.	1.83	1.18	.65
4.	Evaluations of instruction.	1.97	1.11	.86

In the Faculty/Counselor/Student Relationship Module, a positive difference indicating participant perception of achievement occurred in each of the four items. Instructor's role as diagnostician received a post-assessment mean rating of 2.04 and a pre-assessment mean rating of 1.58. The positive difference was .46. Tutoring available in campus learning labs received a post-assessment mean rating of 2.13 and a pre-assessment mean rating of 1.78. The positive difference was .35. Credit by Institutional Exam received a post-assessment mean rating of 2.08 and a pre-assessment mean rating of 1.61. The positive difference was .47. Student accountability-instructor accountability received a post-assessment mean rating of 2.21 and a pre-assessment mean rating of 1.83. The positive difference was .38. The mean ratings and positive differences for the Faculty/Counselor/Student Relationship Module items are displayed in Table VIII.

TABLE VIII

ACHIEVEMENT RATINGS: FACULTY/COUNSELOR/
STUDENT RELATIONSHIP MODULE

Module Topic	Post-Assessment N = 30 $\bar{X}_1$	Pre-Assessment N = 38 $\bar{X}_2$	Difference $\bar{X}_1-\bar{X}_2$
1. Instructor's role as diagnostician.	2.04	1.58	.46
2. Tutoring available in campus learning labs.	2.13	1.78	.35
3. Credit by Institutional Exam.	2.08	1.61	.47
4. Student accountability-instructor accountability.	2.21	1.83	.38

Participant Ratings of Instructional Effectiveness

In both the pre-assessment and the post-assessment, participants rated their use in instruction of the 60 items of the Herrscher Instructional Effectiveness Inventory. The ratings ranged from -1 (not applicable) to 0 (rarely/never) to

1 (sometimes) to 2 (usually) to 3 (always). The ratings were summated for the areas of Instructional Design (25 items), Accommodating Individual Differences (25 items), and Educational Competencies and Goals (10 items). The derived mean post-assessment rating exceeded the derived mean pre-assessment rating in each of the areas. These positive differences were considered to be increases in the instructional effectiveness of participants.

The Instructional Design area included the following items: rationale; form, sharing, appropriateness, domain, cognitive level, consistency, source, and value of objectives; pre-test; redirection; validity, variety, and rigor of learning activities; reference and effectiveness of media; item validity, reference, and variety of testing; self-testing; contracting and mastery/non-mastery grading; recycling; student feedback; and revision. The mean of the post-assessment summated ratings was 53.55 and the mean of the pre-assessment summated ratings was 42.07. The difference between the means was 11.48.

The Accommodating Individual Differences area included the following items: learning pathways; portability of instructional materials; organization; role of instructor; orientation; learning rate; continuous progress; time for mastery; testing when ready; credit by exam; student participation; questing; involvement in learning process; cooperative activities; tutoring; flexibility; freedom, student learning style; student differences in study habits, age, goals, interests, personality, and self-concepts; mastery;

accountability; and instruction principles. The mean of the post-assessment summated ratings was 43.95 and the mean of the pre-assessment summated ratings was 36.00. The difference between the means was 7.95.

The Educational Competencies and Goals area included the following items: communication skills; problem solving, critical thinking; creativity; leadership; self-concept; interpersonal relations; use and acquisition of knowledge; values; and aesthetic awareness. The mean of the post-assessment summated ratings was 23.00 and the mean of the pre-assessment summated ratings was 19.86. The difference between the means was 3.14. The means and positive differences are displayed in Table IX.

TABLE IX

DIFFERENCES BETWEEN SUMMATED POST-ASSESSMENT AND PRE-ASSESSMENT RATINGS OF THE HERRSCHER INSTRUCTIONAL EFFECTIVENESS INVENTORY

Area	Post-Assessment N = 22 $\bar{X}_1$	Pre-Assessment N = 28 $\bar{X}_2$	Difference $\bar{X}_1-\bar{X}_2$
1. Instructional Design (25 items).	53.55	42.07	11.48
2. Accommodating Individual Differences (25 items).	43.95	36.00	7.95
3. Educational Competencies and Goals (10 items).	23.00	19.86	3.14

Student Semester Hours by Term

Student Semester Hours (SSH) data was provided by the Office of the Registrar at the College. In term I, 1978-79, the total Input was 13,331 SSH enrolled and the total Output was 9,327 SSH completed. The total Loss in term I of 4,004 SSH withdrawn amounted to thirty (30%) percent of the total SSH enrolled. In term II, the total Input was 13,182 SSH enrolled and the total Output was 9,471 SSH completed. The total Loss in term II of 3,711 SSH withdrawn amounted to twenty-eight (28%) percent of the total SSH enrolled. In term III, the total Input was 6,074 SSH enrolled and the total Output was 4,474 SSH completed. The total Loss in term III of 1,600 SSH withdrawn amounted to twenty-six (26%) percent of the total SSH enrolled. Percentage figures have been rounded and are displayed in Table X.

TABLE X

SUMMARY OF ENROLLMENT DATA AT FLORIDA KEYS COMMUNITY COLLEGE BY TERM 1978-79

Student Semester Hours (SSH)	Term I Number	Term I Percent	Term II Number	Term II Percent	Term III Number	Term III Percent
Total Loss (SSH withdrawn)	4,004	30	3,711	28	1,600	26
Total Output (SSH completed)	9,327	70	9,471	72	4,474	74
Total Input (SSH enrolled)	13,331	100	13,182	100	6,074	100

Percentage figures have been rounded.

CHAPTER V

INTERPRETATION, CONCLUSIONS, AND RECOMMENDATIONS

Interpretation of Results

Participant ratings of the content of the course indicated a high degree of satisfaction with the modules, the instructional activities and the learning experiences. Participants expressed clearly their desire to learn more about the subjects treated. Participants liked having the course objectives made clear to them and considered the methods of instruction to have been effective. Participants were pleased with their own involvement in the course and were inclined to give themselves high grades. The satisfactory but relatively low rating of 2.63 given item 13, on the other hand, indicated the participants were not so highly satisfied with the opportunities for contact with the group leaders.

Participant perceptions of achievement, as measured by the positive differences between post- and pre-assessment ratings, were highest in norm versus criterion referenced testing (1.25), in the effect of instructor expectancies (1.09), in formative versus summative evaluations (1.08), in the use of recycling in the systems approach (1.00), and in how to encourage learning for mastery (1.00). Participants indicated that they would feel secure, after having completed the course, in writing about differences in styles of learning and in all items pertaining to the faculty/counselor/student relationship. They expressed some insecurity in their ability to handle competency based objectives and the practical application of research. Participants rated highest their confidence in dealing with the concepts of different learning styles and mastery learning. They were least confident in handling the Tyler rationale, a possibly outdated concept, and the Florida Educators' Information Service (since discontinued for community colleges).

Participant ratings of instructional effectiveness, as measured by the Herrscher instrument, showed the greatest increase in the area of instructional design. The items treated in this area pertained to the Herrscher systems approach to instruction: rationale, objectives, pre-test, redirection, learning activities, post-assessment, recycling, and revision. Participants also indicated a substantial increase in their use of ways to accommodate individual differences among learners. Concepts in this area included: learning rates, mastery, role of instructor, flexibility, student differences in study habits, learning styles, and instruction principles. Participants expressed the smallest increase in the area of educational competencies and goals but this was expected since pre-assessment ratings had already indicated a previous frequent use of these instructional approaches.

The output data, as measured by student semester hours for which the grades of A, B, C, or D were received at the end of the semester, showed an increase in the rate of students successfully completing courses in term II and in term III following faculty participation in the faculty-planned instructional effectiveness course. The percentage of students who received F (failed), I (incomplete), W (withdrawn) of X (audit) and who were thus considered unsuccessful in completing for credit the courses in which they had enrolled decreased from thirty (30%) percent in term I to twenty-eight (28%) percent in term II and to twenty-six (26%) percent in term III.

Conclusions

One purpose of this study was to document the development of a satisfactory instructional development course for community college faculty. The faculty at Florida Keys Community College were surveyed to determine their professional needs and the extent of their instructional effectiveness. The results of the surveys were studied by faculty committees. The committee recommendations were used to establish the content of the five modules of the instructional development course. A syllabus/course outline with rationale, bibliography, and competency objectives was drawn up and presented to faculty members and administrators. Faculty members were asked to respond to a pre-assessment of course content. The pre-assessment results were summated and sent to the nationally known educators and to the volunteer faculty members who had agreed to lead the module presentations. The instructional development course was then implemented under the direction of the Dean of Instruction and a Course Planning Committee. A step by step documentation of the development has been presented in the appendix to this study so that the procedure may easily be replicated. At the conclusion of the course, participant satisfaction was demonstrated in each of the items of an evaluation instrument. It is therefore concluded that this purpose of the study was fulfilled.

Herrscher had conceptualized in his systems approach to instruction that the steps of rationale, specific instructional objectives, and pre-assessment were basic to the improvement of instruction in the community college. By specifying their professional needs, the faculty at Florida Keys Community College developed their own rationale and specific instructional objectives for the proposed course. By serving on committees that used survey results to make recommendations for course content and by responding to a pre-assessment of course content, the faculty members were involved from the very beginning in their own learning process. The findings of this study therefore would also lend support to Herrscher's systems approach and would suggest that involvement of learners in the learning process from the very outset is important for the achievement of student satisfaction.

Since student satisfaction would appear to be an important component of success in learning and would tend to urge students to continue in courses until their successful completion, the development of the faculty course could serve as a model for the development by faculty of courses for their prospective students. Bruner had postulated that knowing is a process rather than a product and that to instruct is to involve learners in the process that makes possible the establishment of knowledge. The findings of this study would appear to support Bruner's conceptualizations and to support the thesis that increased instructional effectiveness seeks the involvement of the learner in a process of learning that attracts and holds students.

A second purpose of this study was to describe the impact of a satisfactory instructional development course for community college faculty on the instructional effectiveness of the faculty. The faculty at Florida Keys Community College were given post-assessments that clearly demonstrated an increase in participant perception of achievement at the completion of the course. A comparison of post-assessment ratings with pre-assessment ratings of the Herrscher Instructional Effectiveness Inventory clearly demonstrated an increase in the areas of instructional design, accommodating individual differences, and educational competencies and goals. It is therefore concluded that this second purpose of the study was fulfilled.

Bloom had postulated in his mastery learning concept that the specification of the objectives and content of instruction was necessary if both instructors and learners were to be informed about the expectations of the instruction. Among the highest perceptions of achievement by participants were the effect of instructor expectancies and how to encourage learning for mastery. At the conclusion of the course, participants were most confident in their ability to deal with different learning styles and with mastery learning. The findings of this study would therefore lend support to Bloom's concept of mastery learning.

Common to the concepts of Bloom and Herrscher were criterion-referenced testing and recycling of students who failed to demonstrate mastery of stated objectives. Participants in the study considered an increased understanding of criterion-referenced testing and recycling to be among their highest achievements thus lending further support to mastery learning and to a systems approach to instruction.

A third and final purpose of this study was to describe the impact of a satisfactory instructional development course for community college faculty on the retention of students. Following faculty participation in the instructional development course at Florida Keys Community College presented in term II, 1978-79, an increase occurred in the rate of students successfully completing courses in term II and, subsequently, in term III. It is therefore concluded that this purpose of the study was fulfilled.

In 1978, the task force assigned to study problems of student retention at Florida Keys Community College postulated a cause and effect relationship between quality of instruction and retention of students. The thesis of this study was that improvement of the quality of instruction in a community college through a faculty planned course would be followed by a reduction in the attrition rate of students. It may be concluded that the findings support the postulate of the task force and the thesis of this study.

Recommendations

Since the completion of this study, 7 new members have been added to the full-time faculty of Florida Keys Community College. This sizable new portion of the faculty have presumably not been exposed to the concepts and processes of the instructional development course offered in 1978-79. It is therefore recommended that the faculty planned instructional development course be replicated annually - from the survey of professional needs to the evaluation by reference to the numerical measurement of the student retention rate. The literature of staff development would support this recommendation.

If the instructional development course were replicated, more attention should be given opportunities for faculty members to have contact in an informal manner with the visiting module leaders. More attention should also be given the topic of research in instruction, as well as in subject fields, in order to enhance participants' perceptions of community college instruction as a profession.

As indicated by the findings of this study, more attention should be paid to student output figures as a measure of the quality of instruction. Output student semester hours numerically measure the credit hours successfully completed by students. Simple division of the output hours by the total input student semester hours provides a percentage rate that is readily accessible. The rate of loss may then be easily calculated. If the rate of loss or attrition of students successfully completing courses within the term were to compare unfavorably with the rate of previous terms, the matter would probably bear investigation. Output is the key to measuring quality in higher education. It is therefore recommended that Florida Keys Community College continue to measure quality in the manner described in this study and that the results be reported to the National Council for Staff, Program, and Organizational Development (NCSPOD).

The reporting of development programs by other community colleges in which professional needs were surveyed by available instruments and in which numerical measurements such as student output semester hours were used in program evaluations would contribute to the formulation of a prescriptive theory of instruction. Research in community colleges need not be complicated and time-consuming but it should consist in more than the anecdotal reports of the subjective reactions to participants. Objectively summative evaluations referenced to student output data are needed to establish norms for quality education.

Strategies for Diffusion, Implementation, and Change

The conclusions and recommendations of this study will be publicized in a variety of ways. An abstract of the study will be published in the Crew's Log, the monthly newsletter distributed to the faculty, administration, and service personnel of Florida Keys Community College. The entire study, in hardcover copies, will be presented to the President of the College, the Dean of Instruction, and the Dean of Student Services. A hardcover copy of the study will be presented to the College's Learning Resource Center with the request that it be made available to faculty members and other interested persons. Microfiche copies will be given to the chairpersons of all faculty standing committees. Additional microfiche copies will be made available to faculty members at no charge upon request.

The philosophy of Florida Keys Community College recognizes that in a dynamic world educational needs change. Its primary mission is to meet the changing needs of the community to the extent of its resources. The most important resources of the College are the administration who plan and manage the instruction, the faculty who instruct the students, and the staff who support the entire effort. The enhancement of the quality of instruction is a common concern of all members of the institution. The quality of instruction, however, is the special concern of the Dean of Instruction. At Florida Keys Community College, the Dean of Instruction relies upon the input and support of an Instructional Services Committee. The recommendations of this study will therefore be discussed more in detail at meetings of the Instructional Services Committee.

Concern for the improvement of instruction, considered to be a mark of institutional vitality by the Southern Association of Colleges and Schools, will be a necessary component of the College's planning for the renewal of accreditation by the Association in the coming year. The conclusions and recommendations of this study will be brought to the attention of the faculty committees planning self-evaluation procedures.

Outside Florida Keys Community College, diffusion and implementation for change depend necessarily upon the publication of controversial points of view. Controversy attracts the interest of educators. The conclusions of this study -- that the professional needs of faculty can easily be specified through available survey instruments, that faculty satisfactorily learn about instruction by participation in the process of planning and implementing an instructional development course, and that the quality of education can be measured numerically by the rate of student successful completion of courses -- are controversial statements. Hopefully, they will invite conflicting points of view which will generate interest in the enhancement of quality of instruction.

The clash of thesis with anti-thesis often results dialectically in synthesis. Syntheses strung together in a pattern may form a theory. Instruction in community colleges needs a prescriptive theory to establish norms as to what is quality instruction. A descriptive theory without reference to measurements will not suffice. Theories of learning and theories of human growth are already accepted and widely used. A theory of instruction is lacking; its discovery is the change needed in higher education now.

BIBLIOGRAPHY

Bloom, Benjamin S. "Learning for Mastery." Evaluation Comment (a publication of the Center for the Study of Education, UCLA), I, No. 2 (1968), 1-11.

Bruner, Jerome S. Toward a Theory of Instruction. Cambridge: Harvard University Press, 1966.

Caron, Geraldine T. "Assessing the Developmental Needs of Full-Time Faculty Members at Florida Keys Community College: A Professional Policy Committee Project." Unpublished practicum, Nova University, 1979.

Centra, John A. Strategies for Improving College Teaching. Washington: American Association for Higher Education, 1972.

________. "Self-Ratings of College Teachers: A Comparison with Student Ratings." Journal of Educational Measurement, X, No. 4 (Winter, 1973), 287-295.

________. Faculty Development Practices in U.S. Colleges and Universities. Princeton, N. J.: Educational Testing Service, 1976.

Christensen, Frank A. Staff Development: Perceptions of Faculty and Administrators at Selected Community Colleges in Illinois. Ed. D. Dissertation, Nova University, 1975. ERIC Document ED 130 706.

Claxton, Charles S. Community College Staff Development: Basic Issues in Planning. Atlanta: Southern Regional Education Board, 1976. ED 126 971.

________. "Comprehensive Staff Development in the Community College: Implications for the Office of Institutional Research and Planning." Paper presented at the Annual Meeting of the American Educational Research Association, New York, April 5, 1977. ED 136 857.

Clements, Clyde C. Jr. "Staff Development on a Small Campus." Proceedings: The Conference on Questions and Issues in Planning Community College Staff Development Programs, July 1-3, 1974. James O. Hammons, Ed. University Park, Pa.: Pennsylvania State University, Center for the Study of Higher Education, 1975, 67-75.

Cohen, Arthur M. "Toward a Professional Faculty." New Directions for Community Colleges, 1 (spring, 1973), 101-117.

________. "Upholding the Humanities." Paper presented at the Annual Convention of the American Association of Community and Junior Colleges, Denver, Colorado, April 19, 1977. ED 134 278.

________ and Florence B. Brawer. "The Dyamic Interaction of Student and Teacher." Los Angeles: California University ERIC Clearinghouse for Junior College Information Topical Paper No. 17 (February, 1971). ED 046 395.

________. The Two-Year College Instructor Today. New York: Praeger, 1977.

Cooper, John D. Professional Development Plan, Lansing Community College, 1976-1977. Lansing, Mich.: Lansing Community College, 1976. ERIC Document ED 140 923.

Coward, Tamara B. Professional Development in Higher Education. Washington: McManis Associates, Inc., 1978. ERIC Document ED 164 018.

Cross, K. Patricia. Accent on Learning. San Francisco: Jossey-Bass, 1976.

Drucker, Peter F. People and Performance: The Best of Peter Drucker on Management. New York: Harper's College Press, 1977, 272-3.

Faculty Development Program 1976/77. Palatine, Ill.: William Rainey Harper College, 1976. ERIC Document ED 129 391.

Fitzgerald, Richard F. "The Identification, Rating, and Priority Listing of Institutional Goals in a Community College." Unpublished practicum, Nova University, 1978.

________. "The Development of an Experimental Program for the Improvement of Services and Instruction in a Community College." Unpublished practicum, Nova University, 1979.

Gross, Richard F. "Faculty Growth Contracts." Professional Development in Higher Education. Tamara B. Coward, Ed. Washington: McManis Associates, Inc., 1978, 35. ERIC Document ED 164 018.

Hammons, James O., Ed. Proceedings: The Conference on Questions and Issues in Planning Community College Staff Development Programs, July 1-3, 1974. University Park, Pa.: Pennsylvania State University, Center for the Study of Higher Education, 1975. ERIC Document ED 111 462.

________. "Instructional Change: Some Predictions." New Directions for Community Colleges, 17 (spring, 1977), 75-80.

________ and Terry H. Smith Wallace. An Assessment of Community College Staff Development Needs in the Northeastern United States. University Park, Pa.: Pennsylvania State University, Center for the Study of Higher Education, 1976. ERIC Document ED 128 058.

________. "Staff Development Needs of Public Community College Department/Division Chairpersons." Planning & Changing (Fall, 1976), 97-112.

Handleman, Chester. Opinions of Selected Faculty Members on Curriculum and Instruction at Five South Florida Community Colleges. Ed. D. Dissertation, Nova University, 1975. ERIC Document ED 112 956.

Harvey, L. James. "Professional Development: The Need and the Importance." Professional Development in Higher Education. Tamara B. Coward, Ed. Washington: McManis Associates, Inc., 1978, 1-8. ERIC Document ED 164 018.

Henderson, Lee G. Paper presented at the meeting of the Joint Commission on Postsecondary Education, Tallahassee, FL, September 18, 1979.

Horvath, Ronald J. "JCC Recruitment, Retention, Attrition Project." Louisville, Ky.: Jefferson Community College. ERIC Document (April 6, 1979) ED 167 234.

Jablonsky, Adelaide, Comp. "Dropouts: An Annotated Bibliography of Doctoral Dissertations." ERIC-IRCD Doctoral Research Series, No. 8, (August), 1974. New York: Columbia University. ERIC Clearinghouse on the Urban Disadvantaged. ED 096 362.

Knowles, Malcolm. The Adult Learner: A Neglected Species. Houston: Gulf Publishing Company, 1973.

Milton, Ohmer and others. On College Teaching. San Francisco: Jossey-Bass, 1978.

Mittler, Mary L. and R. Edmund Dolan. Oakton Community College Staff Development Program. Morton Grove, Ill.: Oakton Community College, 1975. ERIC Document ED 114 142.

Novak, Charles R. and Barbara K. Barnes. "Florida and Illinois: Views on Staff Development." New Directions for Community Colleges, 19 (autumn, 1977) 11-18.

O'Banion, Terry. "Patterns of Staff Development." New Directions for Community Colleges, 1 (spring, 1973), 9-30.

________. "Staff Development for Student Development." Community College Frontiers, II, No. 2 (1974), 2-20.

________. "Developing Staff Potential." *New Directions for Community Colleges*, 19 (autumn, 1977).

________. *Organizing Staff Development Programs That Work*. Washington: American Association of Community and Junior Colleges, 1978. ED 164 023.

Parsons, Michael H. "The Instructional Clinic: Staff Development in Action." Paper presented at the International Institute on the Community College (7th, Sarnia, Ontario, Canada, June 15, 1976). ERIC Document ED 129 354.

Peterson, Gary T., Ed. *Staff Development: Mini Models for College Implementation*. Cupertino, Cal.: De Anza College, 1975. ERIC Document ED 112 958.

Raines, Max. *Models for Institutional Development*. Ann Arbor, Mich.: University of Michigan Press, 1973.

Roueche, John. "Role of the Department Chairman in Staff Development." *Role of the Department/Division Chairman in the Community College*. Huntsville, Texas: Sam Houston State University, 1973.

________ and Barton R. Herrscher, Eds. *Toward Instructional Accountability*. Palo Alto: Westinghouse Learning Corporation, 1973.

Romine, Stephen. "Perceptions of an Effective Community College Instructional Climate." *Journal of Higher Education*, XLV, No. 6 (1974), 415-429.

Smith, Albert B. "Evaluating Staff Development Programs." *New Directions for Community Colleges*, 19 (autumn, 1977) 91-101.

Staff and Program Development in Florida's Public Community Colleges, 1974-75. Tallahassee: Florida State Dept. of Education, Div. of Community Junior Colleges, 1976. ERIC Document ED 122 886.

Staff Development: A Profile of Local Institutional Effort. Raleigh, N.C.: North Carolina State Dept. of Community Colleges, 1975. ERIC Document ED 139 465.

Standards of the College Delegate Assembly. Atlanta: Southern Association of Colleges and Schools, 1977, 9.

Terenzini, Patrick T. and Ernest T. Pascarella. "The Relation of Freshman Students' Social and Academic Integration to Attrition." Paper presented at the Annual Forum of the Association for Institutional Research (Los Angeles, California, May 1976). ERIC Document ED 126 843.

Tirrell, J. A. Community College Staff Development: An Annotated Bibliography Updated. Prepared for the National Conference on Personnel Development for Post-Secondary Vocational Education Programs of Less Than Baccalaureate Degree. St. Louis, Mo.: January 18-21, 1976.

Wallace, Terry. The Literature of Staff Development: Emphases and Shortcomings; (and) Community College Staff Development, An Annotated Bibliography. University Park, Pa.: Pennsylvania State University, 1974. ERIC Document ED 094 822.

________. Community College Staff Development: An Annotated Bibliography. University Park, Pa.: Pennsylvania State University, Center for the Study of Higher Education, 1975.

Webb, Jeannine. "Improving Instruction for Undergraduates." Improving Undergraduate Education in the South. William R. O'Connell, Jr., Ed. Atlanta: Southern Regional Education Board, 1979, 33.

Wireman, Billy O. "The Adult Learner -- Education's New Challenge." Miami Herald, September 16, 1979.

"With Freshman Scarcer, Emphasis Shifts to Keeping Present Students." The Chronicle of Higher Education, XVII, No. 9 (October 30, 1978), 1, 6.

Zion, Carol. "Staff Development in the Community College." Improving Undergraduate Education in the South. William R. O'Connell, Jr., Ed. Atlanta: Southern Regional Education Board, 1979, 29.

APPENDIX A. Task Force Report, Problem III

FLORIDA KEYS COMMUNITY COLLEGE

MEMORANDUM

TO: Faculty

FROM: Ann M. Otto, Dean of Student Services

DATE: October 19, 1978

SUBJECT: Action/Planning Task Force Final Report

The attached materials represent considerable effort on the part of the Action/Planning Task Force to address issues dealing with student retention. The Task Force was comprised of students, faculty, staff, and an administrator — representing the entire College community — who met during Term IIIA, 1978. The report contains an in-depth analysis of reasons why students leave Florida Keys Community College with many suggested solutions. I would encourage you to read the report and envision ways in which the suggested solutions could be incorporated into your particular area. Some of the suggestions are idealistic, while others are quite realistic.

If you have any questions or wish to comment on this report, please feel free to contact either Mr. Trantham, Task Force Chairman, any member of the Task Force, or myself.

APPENDIX A

FLORIDA KEYS COMMUNITY COLLEGE

MEMORANDUM

TO: Dr. John Sylvester Smith

FROM: Mr. William Trantham, Chairman
Action Planning Task Force

DATE: September 20, 1978

SUBJECT: Final Report on Study Conducted by the Action Planning Task Force

The Action Planning Task Force would like to express its appreciation to Dr. John Sylvester Smith for authorizing funding for staffing and providing the Board Room for meetings. With the strong support of the Administration, representatives from Administration, faculty, and staff were offered a unique opportunity to work together on a project designed to benefit the institution by which we are all employed. The activities of the Action Planning Task Force resulted in the development of a list of ideas for identification of retention problems and a list of suggested solutions to those problems.

The results of the meetings held during April, May, and June, 1978, are attached. Although the Task Force was charged with addressing problems concerning both recruitment and retention, time constraints afforded development of retention ideas, only. But it was noted that many of the problem areas of retention identified also exist as recruitment problems, such as housing, public relations, transportation, accessibility of classes, and finances. The major difference between these subjects as problems of recruitment rather than retention would be in their relative order of importance. For instance, the problem of public relations was considered fifth in importance in the context of retention, however, it would have been given a much higher priority in the context of recruitment.

The problem areas identified by the Task Force in dealing with retention of students are presented in order of priority (i.e. importance). The priority was determined using a weighted-sum ranking method by the scoring of ballots cast by the Task Force members. The higher priority items are felt to require the more immediate attention. Included with each problem are the five suggested solutions selected as being most effective and immediate. These suggestions are also ranked by priority using the same technique employed for the problem areas. Several suggestions, if implemented, will require expanded Student Services functions. Their effectiveness is dependent upon adequate staffing in that area.

Also attached as an Appendix is a copy of the working document which resulted from "brainstorming" meetings. In its "rough" form, this document provided the core of ideas from which the final statement of problems, solutions and priorities was developed. It is included here to allow consideration of all the suggestions developed by the Task Force.

Since the Task Force was not able to separately address the problem of recruitment, it is suggested that the committee be reconvened at the beginning of Term I, 1978. This, however, requires that the questions of membership and compensation be reconsidered. Replacement of some or all of the Task Force members may be deemed desirable. The subject of compensation created some inequities and should be re-evaluated.

In summary, the members of the Action Planning Task Force propose that the committee be reinstated in August, 1978, to address the problem of recruitment. Working on the Action Planning Task Force was a positive and rewarding experience for all who participated. It is also recommended that consideration be given to the support of additional activities which involve Administration, faculty, and staff working together on problems concerning Florida Keys Community College as a positive method for developing a general feeling of cooperation and cohesiveness among the College family.

As Chairman, I personally express my appreciation to all members of the Action Planning Task Force and to the Administration for supporting the efforts required to attain the goal with which we were charged. I will look forward to working with the Action Planning Task Force again should it be reinstated in August.

cc: Mrs. Ann M. Otto

Action Planning Task Force: Ms. Barbara A. Bates
Mr. Jeffrey Drouillard
Mrs. Peggy Freeman
Mr. George Hammerton
Dr. David Russo
Mr. Larry Singer
Mr. Allen Sivley
Mr. John Thomas

PROBLEM III:

Quality of Instruction Needs to be Improved — Target areas include:

(1) Ineffective teaching;

(2) Curriculum improvement; and,

(3) Student placement.

Suggested Solutions:

A. Implement in-service workshops on teaching methods, utilizing an in-house consultant system. Equip people to advise others in instruction, administration, etc. Upgrade all people to improve the total environment. Curriculum and teaching are affected positively when the total college environment is humanistic.

B. Develop honors through remedial programs for students operating on different levels.

C. Implement a counseling procedure for ineffective teachers.

D. Evaluate the effectiveness of the current teacher evaluation form as a tool for instructional improvement.

E. Post course syllabi in the library for reference by prospective students prior to registration to avoid withdrawals due to misunderstandings about course content.

APPENDIX B. Herrscher Instructional Effectiveness Inventory

INSTRUCTIONAL EFFECTIVENESS INVENTORY

Barton R. Herrscher

Development of the Inventory

This Inventory (validation edition) represents the fourth revision of a checklist originally developed in 1974 for the NIMH Project, the University of Texas at Austin. Its present form, much expanded and far removed from the original, derived from revision data collected as a result of its use with some 300 faculty members from 22 community colleges in nine states. As a validation edition, it will be further utilized and revised in preparation for inclusion as the focus of a forthcoming publication, Designing Effective Instruction by Barton R. Herrscher and Associates, soon to be published by this Center.

Purpose and Use

The purpose of the Inventory is to serve as a guide in identifying college courses which are characterized by sound instructional design, accommodate individual student differences, and strive to attain a variety of worthy educational goals.

As originally conceived, its purpose was to assess the extent to which college instruction was individualized. Expansion of this original narrow purpose into broader concerns represents a significant revision.

This inventory might be used by:

- An individual instructor interested in identifying specific areas where change might result in course improvement.
- Supervisory personnel to assess instructional effectiveness.
- Observers of the instructional process.

For an institution wishing to undertake a college-wide program of instructional improvement, this Inventory might serve as the pre- and post-assessment to determine the extent of the change over a period of time.

No suggestion is offered here as to what constitutes a "good" score on the Inventory. This judgment is left to the user, since numerous variables are involved, including the instructor's familiarity with the concepts included herein; the instructor's desire to innovate; the climate for innovation on campus; and the administrative support for innovation on campus.

Acknowledgments

Appreciation is extended to the following colleagues for their assistance in the development of this Inventory: Dr. Barbara P. Washburn, Austin Community College for overall conceptualization; Dr. James P. DeLuca, New York City Community College for layout and cover design; and Ms. Georgeann Foster for manuscript preparation.

INSTRUCTIONAL EFFECTIVENESS INVENTORY

I. INSTRUCTIONAL DESIGN

Always	Usually	Sometimes	Rarely/Never	Not Applicable	
3	2	1	0	X	1. Rationale: Students are told "why" the course content is important.
3	2	1	0	X	2. Objectives (Form): Objectives are stated in writing in student performance terms.
3	2	1	0	X	3. Objectives (Shared): Objectives are shared with students before instruction.
3	2	1	0	X	4. Objectives (Appropriateness): Objectives are appropriate to the educational level of the students.
3	2	1	0	X	5. Objectives (Domain): Objectives are in the domain(s) (cognitive, affective, psychomotor) appropriate for

the course.

3 2 1 0 X 6. Objectives (Cognitive level): Cognitive objectives at the higher levels of Bloom's Taxonomy are in evidence.

3 2 1 0 X 7. Objectives (Consistency): The objectives are consistent with each other and with the overall purpose of the course.

3 2 1 0 X 8. Objectives (Source): The source from which the objectives are derived has been considered.

3 2 1 0 X 9. Objectives (Value): The value of the objectives selected for inclusion in the course has been substantiated.

3 2 1 0 X 10. Pre-Test: A pre-test is used to diagnose student strengths and weaknesses regarding course content.

3 2 1 0 X 11. Redirection: Students needing remedial work, or advanced level placement, are redirected as determined by the pre-test.

3 2 1 0 X 12. Learning Activities (Validity): The learning activities are keyed to the objectives of the course.

3 2 1 0 X 13. Learning Activities (Variety): A wide range of learning activities is employed in the instructional process.

3 2 1 0 X 14. Learning Activities (Rigor): The learning activities are rigorous, challenging, and motivating.

3 2 1 0 X 15. Media (Reference): Media are viewed not as supplements to instruction, but rather as integral components of instruction.

3 2 1 0 X 16. Media (Effectiveness): Media are selected on the basis

of their proven effectiveness in attaining the various types of learning objectives.

3 2 1 0 X 17. Testing (Item Validity): The test items are keyed to the objectives of the course.

3 2 1 0 X 18. Testing (Reference): Criterion-referenced testing is employed in which student performance is compared with a pre-set standard.

3 2 1 0 X 19. Testing (Variety): The paper-and-pencil test is just one means of assessing student performance; other assessment means are employed.

3 2 1 0 X 20. Self-Testing: Students engage in self-testing and self-correction of errors.

3 2 1 0 X 21. Grading (Contracting): Students are able to contract for the grades they wish to strive for; renegotiation upward or downward is acceptable.

3 2 1 0 X 22. Grading (Mastery): Mastery/non-mastery grading prevails. No grade is awarded until the objectives have been mastered.

3 2 1 0 X 23. Recycling: Students not mastering objectives are allowed more time for study, then a re-take of the test.

3 2 1 0 X 24. Student feedback: Information on student attitudes toward the course and how it is being taught is systematically gathered.

3 2 1 0 X 25. Revision: Course material and methods of instruction are revised based on student performance and attitudes.

II. ACCOMMODATING INDIVIDUAL DIFFERENCES

3 2 1 0 X 26. Learning Pathways: Instruction is individualized with a variety of learning pathways available to the student.

3 2 1 0 X 27. Portability: Instructional materials are portable. Students can determine where and when used; can control the information flow and repeat if not understood.

3 2 1 0 X 28. Organization: The course is well organized so that students can proceed with a minimum of reliance on the instructor for direction.

3 2 1 0 X 29. Role of Instructor: The instructor's role is one of diagnostician, tutor, motivator, catalyst; in short, a manager of learning.

3 2 1 0 X 30. Orientation: Since self-paced, self-directed learning is new to many students, some sort of orientation to this type of instruction is provided.

3 2 1 0 X 31. Rate: Each student proceeds through the course at his own best learning rate.

3 2 1 0 X 32. Continuous Progress: If a student finishes a course early, he is able to move into the next course in the sequence (or another course of his choosing) immediately.

3 2 1 0 X 33. Time: Students spend as much time as necessary to master each topic or unit of the course.

3 2 1 0 X 34. Test Timing: Students are allowed to take tests when they feel they are ready to do so.

3 2 1 0 X 35. Credit by Exam: Students are permitted to "test out" of all (or part) of the course through pre-testing and challenge testing.

3 2 1 0 X 36. Student Participation: Students are actively involved in planning learning activities and setting objectives where appropriate.

3 2 1 0 X 37. Questing: Provision is made for students to "quest", to move out on their own and personally devise learning activities and resources.

3 2 1 0 X 38. Involvement: Students are actively involved in the learning process; they "learn by doing".

3 2 1 0 X 39. Student Cooperation: Students are engaged in coöperative activities; frequently help each other in constructive ways.

3 2 1 0 X 40. Tutoring: Special academic help on a one-to-one basis is available to students needing it (either by the instructor, a paraprofessional, or a student tutor).

3 2 1 0 X 41. Flexibility: A high degree of flexibility is evident in the classroom or laboratory.

3 2 1 0 X 42. Freedom: A general atmosphere of freedom for the student prevails.

3 2 1 0 X 43. Student Learning Style: An attempt is made at matching the media of instruction to the "learning style" of the student.

3 2 1 0 X 44. Student Differences (Study Habits): Provision is made for individual differences in student self-direction, self-initiative and self-responsibility, motivation,

and perseverance.

3 2 1 0 X 45. Student Differences (Age): Where student age differences are great, the unique needs of the adult learner are considered.

3 2 1 0 X 46. Student Differences (Goals and Interests): Provision is made for individual differences in academic or career goals and interests.

3 2 1 0 X 47. Student Differences (Personality and Self-concept): Provision is made for individual differences in personality and self-concept.

3 2 1 0 X 48. Mastery: The expectation is that most (or all) students can master the course if they are given enough time and appropriate instruction.

3 2 1 0 X 49. Accountability: Evidence exists that the instructor is willing to share accountability for learning with students.

3 2 1 0 X 50. Instruction Principles: Attention is given to good "principles of instruction": (a) explicit instructions, (b) material broken into short segments, (c) frequent practice, (d) knowledge of results, and (e) positive reinforcement.

III. EDUCATIONAL COMPETENCIES AND GOALS

3 2 1 0 X 51. Communication Skills: The curriculum is designed to assist the student in gaining competence in the skills of communication and the ability to handle symbol systems.

3 2 1 0 X 52. Problem solving: Instruction provides opportunities for students to engage in problem solving activities.

3 2 1 0 X 53. Critical Thinking: Instruction makes provision for activities designed to increase critical thinking in students.

3 2 1 0 X 54. Creativity: Instruction fosters creativity in students.

3 2 1 0 X 55. Leadership: Instructional activities foster the development of leadership skills in students.

3 2 1 0 X 56. Self-Concept: Instruction makes provision for maximizing sound mental health and improving the self-concepts of students.

3 2 1 0 X 57. Interpersonal Relations: Instruction includes activities designed to improve interpersonal relations skills of students.

3 2 1 0 X 58. Use and Acquisition of Knowledge: Instruction builds students' skills in using and acquiring knowledge.

3 2 1 0 X 59. Values: The curriculum fosters the development of awareness of values and value commitments.

3 2 1 0 X 60. Aesthetics: The curriculum develops students' comprehension of the artistic and aesthetic dimensions of culture, and man's relationship to his physical and social culture.

References

1. Bloom, Benjamin S. *Taxonomy of Educational Objectives: Cognitive Domain.* New York: David McKay Co., 1956.

2. Bloom, Benjamin S. "Learning for Mastery." *UCLA Evaluation Comment* 1 (2), May 1968.

3. Cohen, Arthur M. Dateline '79: Heretical Concepts for the Community College. Beverly Hills: Glencoe, 1969.

4. Eiss, Albert F. and Harbeck, Mary B. Behavioral Objectives in the Affective Domain. Washington: NEA, 1969.

5. Herrscher, Barton R. Implementing Individualized Instruction. Houston: ArChem Company, 1971.

6. O'Connell, William R., Jr. and Moomaw, W. Edmund. A CBC Primer. Atlanta: Southern Regional Education Board, 1975.

7. Popham, W. James and Baker, Eva L. Systematic Instruction. Englewood Cliffs: Prentice-Hall, 1970.

8. Postlethwait, S. N. and Russell, James D. "Minicourses — The Style of the Future?" in Roueche, John E. and Herrscher, Barton R. Toward Instructional Accountability. Palo Alto: Westinghouse Learning Press, 1973.

9. Roueche, John E., Herrscher, Barton R., and Baker, George A. III. Time as the Variable, Learning as the Constant: Competency-Based Instruction in the Community College. Washington: AACJC, 1975.

10. Roueche, John E. and Pitman, John C. A Modest Proposal: Students Can Learn. San Francisco: Jossey-Bass Publishers, 1972.

11. Wilson, S. R. and Tosti, D. T. Learning is Getting Easier. San Rafael, California: Individual Learning Systems, Inc., 1972.

To the User

I hope you found this Inventory helpful in charting directions for instructional improvement. It is my desire to improve this instrument and to make it more effective in accomplishing the purpose for which it has been designed. In this regard, your comments and criticisms are solicited.

Barton R. Herrscher
Center for Educational Development
P. O. Box 34507
Houston, Texas 77034

Copyright © 1976 by
Barton R. Herrscher
All Rights Reserved
Printed in the U.S.A.

Price 25¢
Discounts:
5 - 49 copies,
10%
50 or more, 20%

ARCHEM COMPANY

VALIDATION EDITION

Center for Educational Development
P. O. Box 34507 Houston, Texas 77034

APPENDIX C. Raines Professional Development Needs Survey

RAINES PROFESSIONAL DEVELOPMENT NEEDS SURVEY

Listed below are a series of possible needs related to the context of community college instruction. Please rate how you see the relevance of each need for professional development.

RESPONSE KEY: Use numbers to indicate your response.

4. Extremely relevant
3. Fairly relevant
2. Somewhat irrelevant
1. Extremely irrelevant

RATING DEVELOPMENT NEED

_____ 1. Setting priorities for the knowledge, skills, and values that should be covered within the time constraints of courses.

_____ 2. Determining what knowledge, skills, and values will best prepare students for subsequent courses or employment.

_____ 3. Keeping abreast of new developments in a discipline which needs to be infused into courses.

_____ 4. Relating essential knowledge, skills, and values to the every-day experiences of students.

_____ 5. Defining competency levels as a basis for evaluating student progress (i.e. a minimal level, a desirable level, an optimal level, etc.).

_____ 6. Devising better examinations.

_____ 7. Describing in behavioral terms the performance outcomes for instruction.

_____ 8. Diagnosing the individual learning styles of students as a basis for individualizing instruction.

_____ 9. Increasing capacity to give stimulating lectures.

_____ 10. Increasing capacity to conduct stimulating and productive class discussion.

_____ 11. Understanding the nature of teaching styles and their relationship to different learning styles of students.

_____ 12. Learning to make optimal use of a variety of learning resources (e.g. teaching aides, audio-visual, other media, etc.).

_____ 13. Attaining a better understanding of the nature, philosophy, programs, problems, and possibilities of community colleges.

_____ 14. Defining opportunities to participate in interdisciplinary teaching experiences or other innovative projects.

_____ 15. Gaining experience in teaching new constituents (ethnic minorities, senior citizens, adult women, prisoners, etc.).

_____ 16. Locating opportunities to develop consulting skills.

_____ 17. Knowing how to devise instructional experiments.

_____ 18. Learning how to have more influence on the formulation of academic policies.

_____ 19. Knowing how to make effective use of the counselors.

_____ 20. Learning how to become a more effective advisor to students' clubs or organizations.

_____ 21. Gaining greater depth of knowledge in a discipline.

_____ 22. Gaining greater understanding of the interrelated disciplines.

APPENDIX D. Syllabus/Course Outline

FLORIDA KEYS COMMUNITY COLLEGE

SYLLABUS/COURSE OUTLINE

COURSE TITLE:	INSTRUCTIONAL DEVELOPMENT FOR COMMUNITY COLLEGE FACULTY I	TERM II, 1978-79
		CREDIT: 3 Hours
COURSE PREFIX:	EDG 2930	ROOM: 1203
INSTRUCTOR:	Hal Massey	OFFICE: 2201E
		PHONE: 296-9081 EXT. 251

COURSE DESCRIPTION:

An experimental program of study for improving instructional services in the community college based on an examination of the educational process and the identification of specific curriculum areas where change may result in course improvement.

COURSE GOALS:

1. To develop and maintain a campus environment which fosters the instructor's desire to innovate.
2. To provide opportunities for instructors to explore and share ideas concerning areas of curriculum development which contribute to effective course planning.
3. To encourage the development of competency based objectives which lead to the attainment of Community College mission and goals.
4. To improve instructor/counselor skills to better serve students in developing competencies necessary for achieving personal and educational goals.

COURSE RATIONALE:

The decision to offer the course EDG 2930 "Instructional Development for

Community College Faculty I" in Term II, 1978-79, is an important component of the organization for continuous short, medium, and long-range planning for the total institution highly valued by the Florida Keys Community College faculty and administration.

In the spring of 1978, faculty and administration responded to goal statements provided by the ETS Institutional Goals Inventory. The goals were rated as they were perceived to actually exist and as they should exist on campus. Substantial discrepancies were found to exist between the goals considered most important in their summated "should be" ratings and "is" ratings. For example, the stated goal "to maintain a climate of mutual trust and respect among students, faculty, and administrators" was rated 1st in importance as valued by respondents but 50th as it was perceived to actually exist on campus. Likewise, the goal "to create an institution known widely as an intellectually exciting and stimulating place" was rated 11th as it "should be" and 79th as it actually "is".

The EDG 2930 course "College Consumer Services Education for Community College Personnel I" offered in Term I, 1978-79, addressed itself to the task of modifying the perceived discrepancy in the first mentioned goal rating by offering an experimental program of study based on the concept that a furthering of mutual understanding and trust in the entire college community would enable faculty, administration, and service personnel to better fulfill the primary mission and goals of the community college. The course proved to be very popular. Practically all of the college community reacted favorably and enthusiastically to the offerings and overall approach.

In the fall of 1978, the faculty responded to an Instructional Effectiveness Inventory and to a Professional Development Needs Survey. The ratings provided by these surveys were studied by faculty committees (Professional Policies Committee and Curriculum Committee) who then made suggestions concerning the content of the course EDG 2930 "Instructional Development for Community College Faculty I" to be offered in Term II, 1978-79. Since the instructional format of the Term I course was considered to be satisfactory and effective as rated by formative evaluations, a similar format will be used in the proposed course. The instructional approach will therefore include: approximately 18 hours of group instructional activities led by a visiting lecturer and by volunteers from among faculty personnel, and an undetermined number of hours of intensive self-directed study by participants. It is expected that the Term II course will lessen the perceived discrepancy noted above between the "should be" and "is" ratings of the important goal "to create an institution known widely as an intellectually exciting and stimulating place."

Tuition fee waivers and a variety of textbooks and supplementary reading materials will be provided for participants from the college community. The credits derived from the course may be used in support of requests for renewed certification submitted by individuals on the faculty to the State Department of Education.

PREREQUISITES:

Faculty and Administrative personnel with prior service in a college or permission of the instructor.

PROCEDURES:

An institute approach with lectures, group discussions, and independent or self-directed study. Selected readings from reference materials, reports, and formative and summative evaluations by participants are included.

Guest lecturers will be invited to present material on some modules and to participate as curriculum consultants. Faculty volunteers will organize materials and lead class discussions.

TEXTS: SUGGESTED BIBLIOGRAPHY:

Bloom, Benjamin J., Thomas Hastings and George F. Madaus. Handbook on Formative & Summative Evaluation of Student Learning. New York: McGraw-Hill Book Company, 1971.

_______. Taxonomy of Educational Objectives: Handbook I, Cognitive Domain. New York: David McKay Co., Inc., 1956.

_______. Taxonomy of Educational Objectives: Handbook II, Affective Domain. New York: David McKay Co., Inc., 1964.

Cohen, Arthur M. Objectives for College Courses. Beverley Hills, CA: Glencoe Press, 1970.

_______. Dateline '79: Heretical Concepts for the Community College. Beverley Hills: Glencoe, 1969.

Cross, K. Patricia. Accent on Learning: Improving Instruction and Reshaping the Curriculum. San Francisco: Jossey-Bass Publishers, Inc., 1976.

_______. Beyond the Open Door. San Francisco: Jossey-Bass Publishers, Inc., 1976.

Herrscher, Barton R. Enhancing Instructional Effectiveness. Houston: Archem Company Publishers, 1977.

Kidd, J. R. How Adults Learn. New York: Association Press, 1976.

Knowles, Malcolm. Self-Directed Learning: A Guide for Learners and Teachers. New York: Association Press, 1975.

Levine, Arthur. Handbook for Undergraduate Learning. Jossey-Bass Publishers, Inc., 1978.

Mager, Robert F. & Pipe. Analyzing Performance Problems. Belmont, CA: Fearon Publishers, Inc., 1970.

_______. Developing Attitude Toward Learning. Belmont, CA: Fearon Publishers, Inc., 1968.

_______. Preparing Instructional Objectives. 2nd ed. Belmont, CA: Fearon Publishers, Inc., 1975.

Mayhew, Lewis B. How Colleges Change. Stanford, CA: ERIC Clearinghouse in Information Resources, 1976. (ERIC Document No. ED 125 607)

Roueche, John E. and R. Wade Kirk. Catching Up: Remedial Education. San Francisco: Jossey-Bass Publishers, 1973.

_______. Overcoming Learning Problems. San Francisco: Jossey-Bass Publishers, Inc., 1977.

_______ and Barton R. Herrscher. Time as the Variable, Achievement as the Constant: Competency-Based Instruction in the Community College. Washington, D.C.: AACJC, 1976. (ERIC Document No. ED 122 872)

_______. Toward Instructional Accountability: A Practical Guide to Educational Change. Palo Alto, CA: Westinghouse Learning Press, Division of Westinghouse Learning Corporation, 1973.

SCHEDULE

Day	Date	Time	Module
Tuesday	1/2/79	8:00 AM - 12:00 Noon	A
		1:00 PM - 4:00 PM	B
Tuesday	1/16, 1/30, & 2/13	11:00 AM - 12:00 Noon	C
Friday	2/23	3:00 PM - 5:00 PM	D
Tuesday	2/27	11:00 AM - 12:00 Noon	D
Friday	3/9	3:00 PM - 5:30 PM	E

COURSE MODULES

A. The educational process: teaching strategies/learning styles.

  1. Systems approach: rationale, objectives, pre-assessment, learning activities, re-cycling, post-assessment.
  2. Teaching strategies designed to improve student self-concept (the one best predictor of success in college).
  3. The self-fulfilling prophecy concept as it relates to teacher expectation of student achievement.

4. Benjamin Bloom's "Learning for Mastery" concepts.
5. Students' learning styles: Field dependence/independence, cognitive mapping techniques.
6. The instructor as manager of learning: attempting to match the activities and media of instruction to the learning needs and styles of the student.

B. Developing and utilizing pre- and post- assessment in course planning.
   1. The general purposes of and the differences between norm-referenced and criterion-referenced testing and grading.
   2. Similarities and differences between diagnostic, formative, and summative evaluations.
   3. Taxonomies of educational objectives: cognitive, affective, psychomotor.
   4. Overcoming difficulties in evaluating affective and higher level cognitive objectives.
   5. Advantages and disadvantages of pre-setting the standards and recycling non-succeeders until mastery.
   6. Orientation of students to self-paced, self-directed learning.

C. Constructing and evaluating competency based objectives.
   1. Sources of objectives: learner, society, and subject matter (Tyler's curriculum rationale).
   2. Student participation in setting objectives where appropriate.
   3. Sequencing short-range objectives to meet a long-range goal.
   4. Including creativity, leadership skills, and value commitments among the stated objectives.
   5. Writing objectives in student performance terms: how to state cognitive objectives at the higher levels of Bloom's taxonomy.

6. The competencies currently required of teachers in Florida.
7. Keying test items to stated objectives of the course: comparing student performance to a pre-set standard.
8. Using means other than the paper-and-pencil test to assess student performance.
9. Value of student self-testing and self-correction of errors.
10. Allowing students to attain demonstrable competencies at their own rate.
11. Permitting students to "test out" of all or part of the course with challenge exams when ready.
12. Use of student feedback to re-formulate competency based objectives.

D. Elements of practical research and its application in instruction.

1. Keeping abreast of new developments to be incorporated into one's courses of instruction.
    a. Journals and other written materials
    b. Instructional media resources
    c. Conferences and graduate study
    d. Visiting lecturers
    e. Florida Educators' Information Service
    f. ERIC documents.
2. Gaining greater understanding of disciplines interrelated with one's own instruction.
    a. Validation of course objectives by reference to instructors teaching related disciplines.
    b. The changing entry requirements of higher education in a particular discipline.

3. Developing an awareness of advances in the community college approach to education through personal research and evaluation.
    a. Using student feedback to determine needed changes as to course content and student satisfaction.
    b. Using questionnaires and personal interviews with representatives of the community to identify needed curriculum changes.

E. Developing the faculty/counselor/student relationship.

1. Accommodating individual differences:
    a. Personal characteristics: age, personality, self-concept, attitudes, interests, goals.
    b. Learning variables: rate, style, perseverance, motivation.
    c. Abilities: verbal, numberical, motor, special.
2. Instructor's role as diagnostician, tutor, motivator, and manager of students' self-directed learning.
3. Availability of special academic help on a one-to-one basis.
4. Encouragement of students to move out on their own and to personally devise learning activities and resources.
5. Investigation of student reading rates and study habits.
6. Sharing accountability for learning with students.

SPECIFIC COURSE OBJECTIVES:

When you have completed the course, you will be able, if asked, to present orally or in writing (at least one page typed, double-spaced) a defense of your personal position in regard to the items listed under each of the Course Module topics: (proficiency in the items under any four of the five modules is considered acceptable).

APPENDIX E. Pre-Assessment Survey

Administered at Florida Keys Community College November 28, 1978

N = 38 for Modules A,B,C,D N = 36 for Module E

PRE-ASSESSMENT FOR

EDG 2930 INSTRUCTIONAL DEVELOPMENT FOR COMMUNITY COLLEGE FACULTY I

Indicate the degree of your expertise in writing a 250 word paper on each of the topics listed, according to the following rating scale:

0 = At a complete loss for words

1 = Able to write on the topic, but would lack confidence

2 = Would feel fairly secure in handing in the paper

3 = Able to handle the topic with great confidence

$\bar{X}$	MODULE A
1.03	_____1. Use of re-cycling in the educational systems approach.
1.00	_____2. Measurement of locus of control as developed in social learning theory.
.61	_____3. The Pygmalion effect of instructor expectancies.
1.66	_____4. Differences in styles of learning.
	MODULE B
1.05	_____1. Norm-references vs. criterion-referenced testing.
.95	_____2. Formative evaluations vs. summative evaluations.
1.00	_____3. Bloom's taxonomies or learning objectives.
1.37	_____4. How to encourage learning for mastery.
	MODULE C
.39	_____1. The "Tyler Rationale" of curriculum decision-making.
1.66	_____2. Formulation and implementation of competency statements.
1.53	_____3. Definition of Competency Based Education (CBE).
1.76	_____4. Student assessments other than written tests.

$\bar{X}$	MODULE D
.61	____1. Free services from the Florida Educators' Information Service (FEIS).
1.00	____2. How to use Educational Resources Information Center (ERIC).
1.18	____3. Where to find course objectives in interrelated disciplines.
1.11	____4. Student Instructional Reports and other evaluations of instruction.
	MODULE E
1.58	____1. The instructor's role as diagnostician.
1.78	____2. Tutoring available in campus learning labs.
1.61	____3. Credit by Institutional Exam at Florida Keys Community College.
1.83	____4. Student accountability — instructor accountability.

APPENDIX F. Course Implementation

FLORIDA KEYS COMMUNITY COLLEGE

EDG 2930-Instructional Development for Community College Personnel I

Term II

January 2, 1979

January 2 is the first duty day for Term II, 1978-79.

Tuesday, January 2	General Session - Room 1203
8:30 a.m.	Refreshments
9:00 a.m.	President's Welcome — Dr. John S. Smith
9:15 a.m.	Comments and Material Distribution -- Cabinet Members
9:25 a.m.	Introductory Remarks — Dr. Hal Massey
9:35 a.m.	Module A The educational process: Teaching strategies- Learning styles (or cognitive mopping) — Dr. Barton Herrscher
12:00-1:00 p.m.	Lunch Break
1:00-4:00 p.m.	Module B — Dr. Barton Herrscher

DATE: January 8, 1979

TO: Participants in EDG 2930, Instructional Development for Community College Faculty I

FROM: Hal Massey

As professional educators, all of you have developed many teaching, learning, testing, and/or grading techniques of which you undoubtedly are proud. After listening to Dr. Herrscher's presentation, and to your input during class discussions, I felt many of you would like to share your techniques with the other faculty members.

Therefore, I am soliciting brief papers from interested faculty members describing the one (or more than one) technique you would like included in a digest to be distributed to all full-time and part-time teaching faculty. This will not be a "how to" type digest, but rather a "have you considered this" type digest.

The entries you supply can be included in the digest with or without your name — whichever you prefer. Papers should be as concise as possible and will be collected through the end of January, 1979. The papers will be categorized and the digest distributed about mid-February.

I look forward to receiving ideas from each of you.

HM/sa

January 9, 1979

Faculty Planning Group for Module C

Members: Mrs. Caron, Dr. Freihaut, Mrs. Parks, Mr. Trantham,
Mr. Fitzgerald (absent)

Dr. Massey opened the meeting at 11:04 AM regarding the presentation of Module C. It was noted that Mr. Fitzgerald was absent due to an illness and that Mr. Trantham would be late due to a conflict of a lab class.

Dr. Massey stated that three (3) people were needed to present Module C. Mr. Fitzgerald and Mr. Trantham had previously volunteered. Dr. Freihaut stated that he would be willing to present material for the module.

Dr. Massey referred everyone to the course outline and pointed out that there were twelve (12) topics to be covered in the module. He suggested that the topics be divided into three (3) sections (1-4, 5-8, and 9-12). Using this method the individual working on the presentation would cover one (1) section which would allow approximately 10 minutes for each topic (total 40 minutes) with 10 minutes left for distributing handouts, question and answer period, discussion, etc. Discussion was held and everyone agreed. Dr. Freihaut requested to present section 1-4.

Dr. Massey requested that everyone look through materials pertaining to the course. Suggested materials were Mager's, Preparing Instructional Objectives, Thorwald Esbensen's, Using Performance Objectives, Charles E. Pascal's, Teaching and Learning Booklets (series), and Arthur Cohen's, Objectives for College Courses.

Mrs. Caron suggested the use of a pre and post test on teaching styles or student learning styles. The idea was discussed and decided that it could be used if the individual working on the presentation so desired.

A filmstrip was shown entitled Competency Based Education. It was mentioned that this might be used along with section 5-8 as outlined in Module C.

It was decided that Mr. Fitzgerald would be assigned section 5-8 and that Mr. Trantham would be assigned section 9-12. Mrs. Parks and Mrs. Caron stated that they would help them in any way they could.

Mrs. Parks suggested that another meeting be held if possible when all members would be present. Dr. Massey stated that he would try to schedule another meeting.

The meeting was adjourned at 12:08 with no further discussion.

Respectfully submitted,

Nancy K. Hume

A SUMMARY OF SOME ON-GOING INDIVIDUALIZED INSTRUCTIONAL PROCEDURES

February 13, 1979

Items submitted to Mr. William Trantham for Module C by
Florida Keys Community College Faculty Participants in EDG 2930
"Instructional Development for Community College Faculty I".

SUMMARY OF DATA COLLECTION MEMO RESPONSES

Mr. William Trantham

1. DO YOU HAVE A FORMAT FOR ALLOWING STUDENTS TO TAKE SELF ADMINISTERED TESTS IN YOUR CLASSES? IF SO PLEASE EXPLAIN, IF NOT DO YOU SEE ANY ADVANTAGES TO SELF TESTING AND SELF CORRECTION OF ERRORS?

Bauer, Barbara	There is self-test/self-correcting in all art classes. No format.
Carbonell, Joseph	Yes, we have many competency based programs.
Caron, Geraldine	Nursing policy is the same - see J. Parks answers.
Caron, Robert	No format - No advantages presently in my classroom setup.
Dial, Martha L.	No.
Fitzgerald, Richard	Yes. I often use quizzes or short, objective tests as learning activities rather than measurement instruments. Such would be a take-home, open-book test to be done with others if desired. Correct answers are shown by the overhead projector so that students can self correct the tests. They may ask questions and clear up misunderstandings about the content. Occasionally, I use self-administered and corrected (scored) professionally made tests for diagnostic purposes at the beginning of the course or of a new module.
Otto, Mrs. Ann M.	No. That type of approach can be used in

	Speech. However, I have not devoted the time to preparing the materials.
Parks, Jodi	In our LLS, students self-pace and self-test. After the test, they are scored by lab personnel. Then the student reviews and corrects those missed. The same method is used in NUR 2930: Pharmacology.
Russ, John	No format - Can see the advantages.
Scarlet, Ann	Not in my particular nursing courses, however, it is done in others. I don't really know if there's any advantages to self-testing and self-corrections of errors if you're referring to written tests.
Thompson, Warren	No.
Duguid, William	Not really, but I do make sure the students are aware of the material they are to be tested on by reviewing the important topics the week prior to a quiz. About half take the review seriously and do well on the quiz. As you know, survey courses are usually not as demanding as other courses may be, so I target the major points, concepts, and terms, at the exclusion of covering all available material. I could use self-administered tests for

emphasizing the important items, but I use the review-quiz-review-exam method instead.

In order to reinforce terminology and concepts developed in my survey course, INTRODUCTION TO COMPUTER SCIENCE, I give five quizzes throughout the term, covering from two to five chapters. I prepare new quizzes each term (or at least reword the old ones) and provide an answer sheet for each quiz. The students answer the questions on the quiz and again on the answer sheet. After the quiz, I collect only the answer sheets and the students keep their copy of the quiz.

I allow a reasonable time for the quiz, collect the answer sheets, and immediately discuss the quiz. Hopefully, any student who doesn't understand a quiz question will speak up, or hopefully, in discussing the quiz, I will clarify any misunderstanding of the terms or concepts. At this point, each student should know their point value for the quiz.

After I grade the answer sheets, I do an item analysis of the quiz questions. At the beginning of the next class meeting, I discuss again those questions missed by several students. I array the quiz scores on the blackboard so the students can see how their scores compare with their classmates.

The final grade is based on 50% of the five quiz average score, 30% of the final exam score, and 20% (20 points maximum) for class attendance and participation. Thus, a student can have a bad quiz score, perhaps less than 60 points and still recover enough to receive an A as a final grade.

The final exam is a comprehensive exam, with the exam questions taken primarily from the quizzes given throughout the term. The final exam follows the same format as the quizzes, with the student keeping the exam and turning in only the answer sheet. The final exam is reviewed on the final exam night.

Although it may sound as if I were teaching only the quizzes, I feel the purpose of a survey course is to present new ideas, concepts, and terminology to students. The quizzes emphasize these points, so I use the lecture, review, quiz, and re-review method of learning.

O'Berry, Greg

I have just started to use some programmed materials in one of my classes. It will be

	interesting to see how they work out. These materials include some self-administered tests.
Smith, Beth	Yes. When tests are provided in instructional materials as practice tests, they are encouraged to be used by self-administration. Without penalty, a student can see where he needs to restructure his learning activities.

2. DO YOU HAVE A FORMAT IN YOUR CLASSES FOR ALLOWING STUDENTS TO ATTAIN DEMONSTRATABLE COMPETENCIES AT THEIR OWN RATE? IF SO PLEASE EXPLAIN. IF NOT, HOW COULD SUCH A FORMAT BE OF SERVICE IN YOUR CLASSES?

Bauer, Barbara	Demonstrating actual "objectives" — wheel throwing, designing, etc. by me — students "see and do" at own rate, with project due dates in mind.
Carbonell, Joseph	Yes, self study, module; We have manufactures programs, in step by step format.
Caron, Geraldine	Jan. 1979 - Instituted a "referral lab" to individualize learning based on problem orientation; recording and referral by students or instructor. Students learning styles and locus of control identified by pretests to aid in prescribing individual learning methods.
Caron, Robert	No format. Allowing students to demonstrate their competencies in my courses, or in fact

	any course, depends on size of secretarial and faculty staff. Also, room availability — Could have Social Science Lab.
Dial, Martha L.	Yes. I encourage students moving at a higher rate of accomplishment to do more assignments. "Accounting" is the type of course in which "problem solving" is a tremendous learning aid. I encourage the students to complete as many problems as they possibly can both as homework and in class.
Fitzgerald, Richard	No special format. Each student is given a list of the competencies required for the whole course or for each module. If the student says that he or she already has all these competencies and can demonstrate this, I permit them to miss the classes in which these competencies are treated. Students must assume the initiative in this but are welcomed when they do.
Otto, Mrs. Ann M.	Students continually display improvement/or regression in speech class through oral exercises. In a sense, they know competencies and demonstrate their attainment of them each time.
Parks, Jodi	LLS is self paced within certain time guidelines as dictated by our semester structure. Also, a unit of math modules with NUU 1140 is

	self paced with 12 weeks as a deadline.
Russ, John	No format. Using a format, students could progress at his competent speed, etc. (see #3).
Scarlet, Ann	Not a written format, however, not every student can demonstrate their competencies before they graduate. This is a very small number as they have two years to do this.
Thompson, Warren	Yes. This works both ways, they can also move back. Tests are given when they want to take them and feel they are above the level at which they are working. If they achieve the current level, they move up to a more difficult task.
Duguid, William	Only to the extent that I tell my class that if the material I am discussing is too elementary for them or if for any reason they feel they are wasting their time in my class, I want them to see me before they drop. If we can work out an alternate solution — whereby the student can satisfy their goals and my requirements and still receive credit for the course, I will do my utmost to work toward that solution. Luckily, my drop rate is not too high and I have not had to make too many special considerations. I do feel, however, if you deal with students as adults

	and as individuals, the number of drops in a class will be less.
O'Berry, Greg	These programmed materials include allowing them to demonstrate competencies at their own rate. The programmed materials are question and answer (with informative material and demonstration answers provided to the student).
Smith, Beth	Demonstrating achievement of a skill can be done at the student's rate and recorded on a student-held chart which lists all skills expected to be mastered in course. Instructor holds master chart to see class and individual profile.

3. DO YOU HAVE A FORMAT FOR ALLOWING STUDENTS TO "TEST OUT" OF ALL OR PART OF YOUR COURSE WITH CHALLENGE EXAMS WHEN READY? IF SO PLEASE EXPLAIN. IF NOT, HOW COULD SUCH A FORMAT BE OF SERVICE IN YOUR CLASSES?

Bauer, Barbara	Students "test out" all of the time. There are no hidden exams; critiques are on-going and experience is critical to understanding.
Carbonell, Joseph	Not to completely "test out", but it could be arranged in a very short time.
Caron, Geraldine	Nursing policy is the same - see J. Parks answers.
Caron, Robert	No format.

Dial, Martha L.	I have encouraged one student who would have dropped out to take the Accounting I (Management Course) since the course I am presently teaching is too fundamental for her. She will attend my class weekly but will work out of another text and workbook. She will be tested upon completion of each accounting cycle, possibly four times, plus a final.
Fitzgerald, Richard	Same as question #2. I encourage one who wishes to test out of all to do advanced work if he so desires under my supervision and with my encouragement. Happens rarely. It is my understanding that only about 19 credit hours were awarded last year on the basis of institutional exams and that these were given to persons not enrolled in a class so that no FTE were accumulated. It would seem to me that students should be encouraged to enroll in a class and then test out so that the college could get the FTE credit.
Otto, Mrs. Ann M.	No.
Parks, Jodi	A student may challenge any nursing course if they have a background that shows experience, education, etc. within that area. If the theory portion is completed successfully at

	75%, then a practical, lab exam follows.
Russ, John	I believe the educational advantages and disadvantages to the student, to other students (the class), and to the instructor would vary according to the specifics of the format. No format.
Scarlet, Ann	Every nursing course has challenge exams. The student usually chooses not to do this because most feel the experience of going over the material again is very beneficial.
Thompson, Warren	No format. I change texts quite often. There are always new things in new texts that they need to either (1) change their methods, (2) add to their present knowledge, or (3) assume a different approach to achieve their goals.
Duguid, William	Although I have never been asked, I would allow students to take any or all of my quizzes and the final exam at any point during the term and thus "test out" for the course. I think I would need some guidance on preparing a challenge exam so I could be assured I would not be violating good academic principles. I think such an exam would be useful in my class.

	I have allowed "test out" processes in other classes. I would allow students to complete all the programming assignments at their own pace, when I was teaching the computer programming classes. If they completed the assignments early, then in effect they "tested out" of the course. This procedure also allowed the students to advance at their own pace (Item 2). Naturally, this procedure would not work in all classes.
O'Berry, Greg	No, I do not at the present time. However, the idea appeals to me somewhat. It might allow the students to proceed on to more advanced work.
Smith, Beth	If the student can take unit or final exam and pass without all the learning strategies necessarily being implemented, it is allowed. More advanced work provided.

4. DO YOU USE STUDENT FEEDBACK TO REFORMULATE COMPETENCY BASED OBJECTIVES? IF SO, PLEASE EXPLAIN. IF NOT, DO YOU THINK SUCH A FORMAT WOULD BE OF USE IN YOUR CLASSES?

Bauer, Barbara	Competency is obvious in a student's actual work and how one can verbalize/vocalize these experiences learned sets up spontaneity in the classroom. Students are urged to speak out or privately, concerning classroom feed-

	back, their individual situation and relationships to me. I am a guide, not a philosopher. There are many ways to approach creation of works. Students come up with various devices. I learn too.
Carbonell, Joseph	Yes, and also objectives from all the manufacturers as well as many of our graduate employers.
Caron, Geraldine	Nursing policy is the same - see J. Parks answers.
Caron, Robert	Yes, examinations, orals, and research. Also a personal questionnaire on the course.
Dial, Martha L.	Yes, I ask each student at the beginning of the term to explain the purpose and the anticipated accomplishments the course will bring to that student upon completion. I then assess by test and classroom work whether I am reaching the goal anticipated. I work individually with the student, and hopefully by the time the 15 weeks are up, the student at least has reached a satisfactory point within reach of his/her goal. My main objectives in all cases is to give the students a beginning background and understanding of bookkeeping, business accounting so that he/she may be able to set up and maintain a simple set of financial books and

	can be accountable for the postings therein.
Fitzgerald, Richard	Yes. I regularly go over the competencies with the students near the end of the term as a review for the final exam. At that time, I ask for their feedback so as to reformulate the competency statements, if necessary, for the succeeding term. The final exam is keyed to the course competencies. A random selection of the competencies forms the basis of the exam.
Otto, Mrs. Ann M.	Students are asked to indicate specific interest/trouble areas during first class session. Materials pertinent to these areas are then incorporated into class materials/sessions.
Parks, Jodi	Yes, each nursing course is evaluated by students at course end and includes all facets — books, AV aids, presentations, contents, etc. These are used for revisions for the next time it is offered. Student feedback is employed in all aspects of the nursing program from complaints to content. We have an appropriate procedure for all aspects of this.
Russ, John	Seldom. Yes, it could be "of use".
Scarlet, Ann	Certainly. At the end of every term, nursing

	students evaluate the course and the objectives, make suggestions and recommendations which are acted on by the faculty. Often times a suggestion may come at the beginning of the course or in the middle and if it is a reasonable one, alterations are made then.
Thompson, Warren	Yes. If the students want more of a sequence, they ask for it. I find it and present it. If the objectives are too broad, I try to make them more specific and visa versa. The student is the customer and they "know" what they "don't want", so I listen and try to secure more and better material. This is a "must" for my classes with students from several states and several foreign countries. Example Geography. All foreign students want to know more about the U.S. Geography seems to be a place to get this information.
Duguid, William R.	No. Considering that this is a survey course, (Intro. to Computer Science), I feel I am better qualified to determine the objectives. This would not exclude the possibility that if a student offered an opinion regarding the objectives that I would totally disregard the opinion. I do adjust the objectives from term to term

	depending on how I perceive the students in the previous term responding to the objectives.
O'Berry, Greg	I haven't as yet, since we have been using competency based objectives for only a relatively short time. However, I plan to use some student feedback this year for just that very purpose.
Smith, Beth	By asking students what they feel they should know by the end of the course, and by student evaluating at the end — this can be accomplished.

FLORIDA KEYS COMMUNITY COLLEGE

MEMORANDUM

DATE: February 21, 1979

TO: All Participants - EDG 2930, Instructional Development for Community College Faculty

FROM: Hal Massey

As announced at the last class meeting, Dr. Ross E. Moreton has kindly agreed to present Module D, "Elements of Practical Research and Its Application in Instruction", scheduled Friday, February 23, from 2:30-5:30 PM. He is replacing Dr. George Barton who will be unable to attend the session. The meeting will be held in Room 1203.

Dr. Moreton is Associate Director, Center for Higher Education and Specialization Director, Vocational, Technical, and Occupational Education - Nova University. He is extremely well-qualified to handle the module and I'm sure all participants will find the session to be most interesting.

Dr. Moreton has requested that each class member, prior to the class session, give careful thought to the following:

> In your particular discipline or curriculum area, be prepared to discuss and/or develop an idea, concept, problem or something of real concern that you would like to investigate further. This concern may represent a problem to be solved or something to be organized. The opportunity to discuss your concerns will be provided in small group sessions.

Please bring your ideas with you.

cc: Dr. Moreton

FLORIDA KEYS COMMUNITY COLLEGE

MEMORANDUM

DATE: February 27, 1979

TO: All Participants in EDG 2930, Instructional Development for Community College Faculty I

FROM: Hal Massey

Participants enrolled for credit in EDG 2930, Instructional Development for Community College Faculty I, who were absent on February 23, and who wish to make up work missed in Module D (taught by Dr. Moreton), please see me at your earliest convenience for make-up assignment.

HM/sa

BIOGRAPHICAL SKETCH

Richard Francis Fitzgerald

For the past six years, Richard Fitzgerald has pursued a new professional career as a member of the faculty at Florida Keys Community College. Initially employed as an adjunct instructor of English and Philosophy in 1974, he became a full-time instructor in these subjects and in Education the following year. As a faculty member at the College, Richard Fitzgerald served on the Curriculum Committee as its Chairman and reported local research on curricular development and non-traditional approaches in higher education. In 1977, he worked closely with the Dean of Instruction in the preparation of the Fifth Year Interim Report of the College for the Southern Association of Colleges and Schools. He was promoted in the spring of 1979 to the position of Chairman of the Liberal Arts Division.

In an earlier career, Richard Fitzgerald served as a Roman Catholic priest in northwestern Pennsylvania before retiring for health and personal reasons. Primarily involved in education, he was an instructor of Social Studies in a private preparatory school from 1945 until 1959. He was an officer in the Catholic Education Association of Pennsylvania and published articles in its Journal. He was the author of a popular workbook, Understanding Social Problems, and also wrote a series of 32 articles on American History for Hi-Time, a national weekly magazine for high school students.

In 1960, Richard Fitzgerald was named Rector of Saint Mark Seminary, an institution for the education of students for the priesthood. He planned and supervised construction of a residence-classroom complex to house 250 students and secured accreditation of its instructional program by the Middle States Association of Colleges and Schools. In 1962, he was named a Domestic Prelate by Pope John XXIII and given the title of Right Reverend Monsignor.

Becoming more involved in community concerns in 1967, Richard Fitzgerald chaired the Mayor's Commission on Human Rehabilitation that established nationally acclaimed facilities for off-the-street and continuing care of alcoholics. In the following year, he was made an honorary citizen of Erie, Pennsylvania, and given a Key to the City for his accomplishments. Richard Fitzgerald then coordinated diocesan-wide fundraising activities that resulted in the contribution of millions of dollars to charities within a two year period. He was assigned the pastorship of a church and continued in this capacity until his decision in 1973 to seek a position in public instruction in the more suitable climate of Florida.

Richard Fitzgerald began his advanced educational training at Saint Bonaventure University. He received a Bachelor's degree cum laude from the institution in 1941. He pursued theological studies on the same campus at Christ the King Seminary until 1945. Following ordination to the priesthood in 1944, Richard Fitzgerald continued graduate studies in Philosophy and was awarded his Master's degree from the University in 1951.

From 1961 until 1965, Richard Fitzgerald pursued doctoral level studies in the Graduate School of Education at Case-Western Reserve University. In 1977, he renewed his graduate studies in the Program for Community Colleges of the Nova University Center for Higher Education.

FINAL MARP SIGNATURE PAGE

I certify that I have read and am willing to sponsor this Major Applied Research Project submitted by Richard F. Fitzgerald. In my opinion it conforms to acceptable standards and is fully adequate in scope and quality, as a Major Applied Research Project for the degree of Doctor of Education at Nova University.

Feb 3, 1980 — G M Barton

Date — Dr. George M. Barton
MARP Advisor

I certify that I have read this Major Applied Research Project and in my opinion it conforms to acceptable standards for a Major Applied Research Project for the degree of Doctor of Education at Nova University.

Feb 8, 1980 — George Mehallis

Date — Dr. George Mehallis
Local Professional Reader

This Major Applied Research Project was submitted to the Central Staff of the Center for Higher Education of Nova University and is acceptable as partial fulfillment of the requirements for the Degree of Doctor of Education.

Feb. 7, 1980 — Eugene E. DuBois

Date — Dr. Eugene E. DuBois
Central Staff Committee Member

ERIC Clearinghouse for Junior Colleges
96 Powell Library Building
University of California
Los Angeles, California 90024